

REVISION OF THE AMYCTERIDES (COLEOPTERA).

PART VIII. THE EUOMIDES.

By EUSTACE W. FERGUSON, M.B., CH.M.



[Read 29th August, 1923.]

The *Euomides*, as generally understood, comprise all the short-scaped species of the Amycterinae. It is extremely doubtful, however, if the division thus made by Lacordaire (Gen. Coleop., vi., 1863, p. 309) into *Amycterides vrais* and *Euomides* is valid.

The group is a convenient one in many respects, but there seems to be no character, common to all the members, which will mark them off from the rest of the subfamily. The genera are for the most part very distinct from each other and exhibit a greater variety of form than is seen elsewhere in the subfamily.

The difficulty of defining the *Euomides* on the length of the scape was recognised by Pascoe who described several genera, of the location of which he was doubtful. There is, indeed, no absolute break in the series connecting genera with very short scapes with those genera like *Acantholophus* and *Phalidura* in which the scape is always long. One or two genera, in fact, in which the scape is recognisably long, are more closely allied to short-scaped genera than to the *Amycterides vrais*; *Polycrета*, for example, is much closer to *Ennothus* and *Oditesus* than to *Hyborrhynchus* and *Anascoptes*. *Chriotyphus* also is probably more at home among the *Euomides* than among the genera allied to *Talaurinus*.

The rostrum shows considerable variation in structure, particularly of the upper surface; the two inner ridges which, in conformity with previous usage, I have continued to call the internal ridges, are always present, but in some species are raised into distinct crests. The clypeal plate, a small shining triangular plate at the apex of the rostrum, projects, in the majority of the genera of the group, rather strongly above or in front of the general level, whereas in the majority of the long-scaped genera it is more or less deeply sunken between the anterior ends of the external or marginal ridges of the dorsum. This character, however, is not constant; in *Euomus* the plate is intermediate in position, while in *Mythites* the plate is almost as deeply set as in *Talaurinus*. In *Aedriodes* the position is peculiar, the plate being set on the dorsum and hardly projecting above the general surface, though not deeply sunken. I have used the word exerted to describe the condition in which the plate projects more or less strongly.

The submentum is squarely cut, as maintained by Lacordaire, but in many of the species the margin is bisinuate or even strongly lobate in the middle.

Lacordaire is, however, on surer ground in speaking of the visibility of the mouth parts, usually in the Amycterides deeply sunk in the buccal cavity: "Le

REVISION OF THE AMYCTERIDES (COLEOPTERA).

PART VIII. THE EUOMIDES.

By EUSTACE W. FERGUSON, M.B., CH.M.



[Read 29th August, 1923.]

The *Euomides*, as generally understood, comprise all the short-scaped species of the Amycterinae. It is extremely doubtful, however, if the division thus made by Lacordaire (Gen. Coleop., vi., 1863, p. 309) into *Amycterides vrais* and *Euomides* is valid.

The group is a convenient one in many respects, but there seems to be no character, common to all the members, which will mark them off from the rest of the subfamily. The genera are for the most part very distinct from each other and exhibit a greater variety of form than is seen elsewhere in the subfamily.

The difficulty of defining the *Euomides* on the length of the scape was recognised by Pascoe who described several genera, of the location of which he was doubtful. There is, indeed, no absolute break in the series connecting genera with very short scapes with those genera like *Acantholophus* and *Phalidura* in which the scape is always long. One or two genera, in fact, in which the scape is recognisably long, are more closely allied to short-scaped genera than to the *Amycterides vrais*; *Polycrета*, for example, is much closer to *Ennothus* and *Oditesus* than to *Hyborrhynchus* and *Anascoptes*. *Chriotyphus* also is probably more at home among the *Euomides* than among the genera allied to *Talaurinus*.

The rostrum shows considerable variation in structure, particularly of the upper surface; the two inner ridges which, in conformity with previous usage, I have continued to call the internal ridges, are always present, but in some species are raised into distinct crests. The clypeal plate, a small shining triangular plate at the apex of the rostrum, projects, in the majority of the genera of the group, rather strongly above or in front of the general level, whereas in the majority of the long-scaped genera it is more or less deeply sunken between the anterior ends of the external or marginal ridges of the dorsum. This character, however, is not constant; in *Euomus* the plate is intermediate in position, while in *Mythites* the plate is almost as deeply set as in *Talaurinus*. In *Aedriodes* the position is peculiar, the plate being set on the dorsum and hardly projecting above the general surface, though not deeply sunken. I have used the word exerted to describe the condition in which the plate projects more or less strongly.

The submentum is squarely cut, as maintained by Lacordaire, but in many of the species the margin is bisinuate or even strongly lobate in the middle.

Lacordaire is, however, on surer ground in speaking of the visibility of the mouth parts, usually in the Amycterides deeply sunk in the buccal cavity: "Le

menton et les mâchoires sont moins enfoncés dans la cavité buccale et aussi visibles que dans le commun des Curculionides, par suite du moindre développement des mandibules."

It is possible that in these structures valid characters may be found for differentiating the group. The mandibles in particular require further study; in the majority of the species, if not in all, the end of one appears slightly to overlap the other. This is associated with the development of a dentiform projection on one side with a slight emargination above it. The condition reaches its maximum development in *Polycreta*; in other genera, however, the divergence from the normal is so slight as hardly to be recognised.

The prothorax exhibits an extraordinary diversity of structure, in a manner not seen elsewhere in the subfamily; ocular lobes are generally present, though absent in a few genera.

The elytra also vary considerably, but present no characters for differentiating the group. The tarsi are as a rule relatively short, the posterior tarsi always being slightly longer, but in *Dialeptopus* the tarsal joints are very long and slender.

The male genitalia are comparatively simple in type in all the species I have dissected; the aedeagus is of the common type found in the subfamily, while the eighth sternite is represented by two triangular pieces of chitin, not showing any tendency to the development of forceps.

In view of my inability to define the group, I have not attempted to tabulate the genera here reviewed, believing it preferable to leave tabulation until such time as the whole of the genera can be revised. I have included in the scope of this paper all the genera, with one exception, not previously dealt with in my revision. These genera are *Euomus*, *Mythites*, *Bubaris*, *Brachymycterus*, *Dialeptopus*, *Tetralophus*, *Cucullothorax*, *Alexirhea*, *Aedriodes*, *Melanegis*, *Atychoria*, *Sosytelus*, *Oditesus*, *Ennothus*, *Polycreta*, *Acherres* and *Amorphorhinus*.

To this list I have added two new genera. The exception mentioned above is *Opetiopteryx*, and it is omitted from the revision because I do not regard the genus as belonging to the subfamily; the reasons for its exclusion I have discussed elsewhere (Proc. Roy. Soc. Victoria, xxxiv., 1921, p. 22).

It is possible that a further division of one or two of the genera, herein considered, may be necessary. Also it may be necessary in the future, with the discovery of intermediate forms, to unite genera separated on somewhat trivial characters.

Geographical Distribution.—The group as a whole occurs throughout the greater part of Australia, but is unrecorded from the North-West and the Northern Territory. Although thus widespread, the group is by far most abundantly represented in Western and South Australia. In the West occur *Euomus*, *Mythites*, *Brachymycterus*, *Dialeptopus*, *Cucullothorax*, *Alexirhea*, *Aedriodes*, *Melanegis*, *Oditesus*, *Ennothus*, *Polycreta*, *Acherres* and *Amorphorhinus*. With the exception of *Mythites*, *Dialeptopus*, *Acherres* and *Amorphorhinus*, all these genera are peculiar to Western Australia, as are also the two new genera described herein. *Mythites* and *Amorphorhinus* occur throughout the States, the former also extending into Tasmania, *Dialeptopus* and *Acherres* extending into South Australia and the former probably into Victoria. Of the remaining genera, *Bubaris* is mainly eastern, but occurs in South Australia; *Sosytelus* is limited to New South Wales; *Atychoria* is South Australian; and *Tetra-*

menton et les mâchoires sont moins enfoncés dans la cavité buccale et aussi visibles que dans le commun des Curculionides, par suite du moindre développement des mandibules."

It is possible that in these structures valid characters may be found for differentiating the group. The mandibles in particular require further study; in the majority of the species, if not in all, the end of one appears slightly to overlap the other. This is associated with the development of a dentiform projection on one side with a slight emargination above it. The condition reaches its maximum development in *Polycreta*; in other genera, however, the divergence from the normal is so slight as hardly to be recognised.

The prothorax exhibits an extraordinary diversity of structure, in a manner not seen elsewhere in the subfamily; ocular lobes are generally present, though absent in a few genera.

The elytra also vary considerably, but present no characters for differentiating the group. The tarsi are as a rule relatively short, the posterior tarsi always being slightly longer, but in *Dialeptopus* the tarsal joints are very long and slender.

The male genitalia are comparatively simple in type in all the species I have dissected; the aedeagus is of the common type found in the subfamily, while the eighth sternite is represented by two triangular pieces of chitin, not showing any tendency to the development of forceps.

In view of my inability to define the group, I have not attempted to tabulate the genera here reviewed, believing it preferable to leave tabulation until such time as the whole of the genera can be revised. I have included in the scope of this paper all the genera, with one exception, not previously dealt with in my revision. These genera are *Euomus*, *Mythites*, *Bubaris*, *Brachymycterus*, *Dialeptopus*, *Tetralophus*, *Cucullothorax*, *Alexirhea*, *Aedriodes*, *Melanegis*, *Atychoria*, *Sosytelus*, *Oditesus*, *Ennothus*, *Polycreta*, *Acherres* and *Amorphorhinus*.

To this list I have added two new genera. The exception mentioned above is *Opetiopteryx*, and it is omitted from the revision because I do not regard the genus as belonging to the subfamily; the reasons for its exclusion I have discussed elsewhere (Proc. Roy. Soc. Victoria, xxxiv., 1921, p. 22).

It is possible that a further division of one or two of the genera, herein considered, may be necessary. Also it may be necessary in the future, with the discovery of intermediate forms, to unite genera separated on somewhat trivial characters.

Geographical Distribution.—The group as a whole occurs throughout the greater part of Australia, but is unrecorded from the North-West and the Northern Territory. Although thus widespread, the group is by far most abundantly represented in Western and South Australia. In the West occur *Euomus*, *Mythites*, *Brachymycterus*, *Dialeptopus*, *Cucullothorax*, *Alexirhea*, *Aedriodes*, *Melanegis*, *Oditesus*, *Ennothus*, *Polycreta*, *Acherres* and *Amorphorhinus*. With the exception of *Mythites*, *Dialeptopus*, *Acherres* and *Amorphorhinus*, all these genera are peculiar to Western Australia, as are also the two new genera described herein. *Mythites* and *Amorphorhinus* occur throughout the States, the former also extending into Tasmania, *Dialeptopus* and *Acherres* extending into South Australia and the former probably into Victoria. Of the remaining genera, *Bubaris* is mainly eastern, but occurs in South Australia; *Sosytelus* is limited to New South Wales; *Atychoria* is South Australian; and *Tetra-*

lophus is Victorian and South Australian with a possible extension into Western Australia.

This distribution is shown in tabular form below, and the graphic representation brings out the marked preponderance of the genera in Western Australia, fifteen genera out of nineteen being represented in that State, while eleven are peculiar to it. South Australia and New South Wales have each one genus peculiar to the State. Of the remaining two genera not represented from Western Australia, one—*Tetralophus*—possibly does occur there, and the other—*Bubaris*—is eastern, having its headquarters in New South Wales and Queensland. The number of described species known from each State is also indicated on the table. These figures show that species as well as genera preponderate in Western Australia. The eastern distribution of *Mythites* and *Bubaris* is also brought out.

Geographical Distribution of the Genera.

Genera.	Species.	W.A.	S.A.	C.A.	Vic.	Tas.	N.S.W.	Q.
<i>Euomus</i> . . .	4	x (4)						
<i>Euomella</i> . . .	1	x (1)						
<i>Mythites</i> . . .	13	x (1)	x (4)		x (3)	x (1)	x (8)	x (1)
<i>Bubaris</i> . . .	6		x (1)	x (2)	x (1)		x (3)	x (3)
<i>Brachymycterus</i>	1	x (1)						
<i>Dialeptopus</i> .	9	x (5)	x (4)		?			
<i>Tetralophus</i>	3	?	x (2)		x (2)			
<i>Cucullothorax</i> .	1	x (1)						
<i>Alexirhea</i> .	3	x (3)						
<i>Aedriodes</i> ..	9	x (9)						
<i>Melanegis</i> ..	1	x (1)						
<i>Atychoria</i> ..	1		x (1)					
<i>Sosytelus</i> . . .	1						x (1)	
<i>Oditesus</i> ..	3	x (3)						
<i>Ennothus</i> ..	1	x (1)						
<i>Polycrета</i> . . .	1	x (1)						
<i>Acherres</i> . . .	5	x (4)	x (1)	x (1)				
<i>Paroditesus</i> ..	1	x (1)						
<i>Amorphorhinus</i>	6	x (2)	x (2)		x (1)		x (2)	x (2)
Totals Gen.	19	15	7	2	4	1	4	3
Spec.	70	38	15	3	7	1	14	6

EUOMUS.

Schönherr. Mantissa Secund. fam. Cure., 1847, p. 52; Lacordaire, Gen. Coleop., vi., 1863, p. 316.

Large, elongate, compressed. Head convex, partially concealed; separated from rostrum above by a transverse sulcus; supraciliary ridges present. Rostrum short and thick, the upper surface sulcate in the basal portion, the internal ridges present, not cristaform; clypeal plate more or less exserted, not deeply sunken; submentum bisinuate or lobate. Scrobes strongly curved. Antennae short, the scape short and stout, funicular joints short. Eyes ovate, finely faceted. Prothorax strongly transversely convex, rounded on sides; apex strongly produced above, with strong ocular lobes; surface granulate. Elytra elongate, widest at

lophus is Victorian and South Australian with a possible extension into Western Australia.

This distribution is shown in tabular form below, and the graphic representation brings out the marked preponderance of the genera in Western Australia, fifteen genera out of nineteen being represented in that State, while eleven are peculiar to it. South Australia and New South Wales have each one genus peculiar to the State. Of the remaining two genera not represented from Western Australia, one—*Tetralophus*—possibly does occur there, and the other—*Bubaris*—is eastern, having its headquarters in New South Wales and Queensland. The number of described species known from each State is also indicated on the table. These figures show that species as well as genera preponderate in Western Australia. The eastern distribution of *Mythites* and *Bubaris* is also brought out.

Geographical Distribution of the Genera.

Genera.	Species.	W.A.	S.A.	C.A.	Vic.	Tas.	N.S.W.	Q.
<i>Euomus</i> . . .	4	x (4)						
<i>Euomella</i> . . .	1	x (1)						
<i>Mythites</i> . . .	13	x (1)	x (4)		x (3)	x (1)	x (8)	x (1)
<i>Bubaris</i> . . .	6		x (1)	x (2)	x (1)		x (3)	x (3)
<i>Brachymycterus</i>	1	x (1)						
<i>Dialeptopus</i> .	9	x (5)	x (4)		?			
<i>Tetralophus</i>	3	?	x (2)		x (2)			
<i>Cucullothorax</i> .	1	x (1)						
<i>Alexirhea</i> . .	3	x (3)						
<i>Aedriodes</i> . .	9	x (9)						
<i>Melanegis</i> . .	1	x (1)						
<i>Atychoria</i> . .	1		x (1)					
<i>Sosytelus</i> . . .	1						x (1)	
<i>Oditesus</i> . .	3	x (3)						
<i>Ennothus</i> . .	1	x (1)						
<i>Polycrета</i> . . .	1	x (1)						
<i>Acherres</i> . . .	5	x (4)	x (1)	x (1)				
<i>Paroditesus</i> . .	1	x (1)						
<i>Amorphorhinus</i>	6	x (2)	x (2)		x (1)		x (2)	x (2)
Totals Gen.	19	15	7	2	4	1	4	3
Spec.	70	38	15	3	7	1	14	6

EUOMUS.

Schönherr. Mantissa Secund. fam. Cure., 1847, p. 52; Lacordaire, Gen. Coleop., vi., 1863, p. 316.

Large, elongate, compressed. Head convex, partially concealed; separated from rostrum above by a transverse sulcus; supraciliary ridges present. Rostrum short and thick, the upper surface sulcate in the basal portion, the internal ridges present, not cristaform; clypeal plate more or less exserted, not deeply sunken; submentum bisinuate or lobate. Scrobes strongly curved. Antennae short, the scape short and stout, funicular joints short. Eyes ovate, finely faceted. Prothorax strongly transversely convex, rounded on sides; apex strongly produced above, with strong ocular lobes; surface granulate. Elytra elongate, widest at

base or in front of middle, declivous posteriorly; humeral angles very strongly advanced; dorsum foveate, interstices granulate. Prosternum concave in front of anterior coxae. Venter with a boss-like protuberance on each side of the two basal segments, except in *E. scorio*. Legs rather short and stout. Tarsi short and rather broader, the posterior slightly more elongate.

Genotype, *Amycterus insculptus* Bohemann, 1843.

The genus as described above comprises four species, *insculptus*, *stephensi*, *scorio* and a new species. *E. scorio* might, however, be reasonably regarded as generically distinct from the other three species. It differs in having a somewhat longer rostrum with longer internal ridges and a more strongly projecting clypeal plate; the submentum also is strongly lobate, not merely bisinuate, and there are other minor differences.

Euomus was proposed by Schönherr in 1847 for a group of species previously included in *Amycterus*, the following species being included in the genus: *insculptus*, *nodipennis*, *scorio*, *westwoodi*, *stephensi*, *basalis* and *fahrei*. Of these, *nodipennis* has been placed in *Aedriodes*, *westwoodi* in *Talaurinus*, *basalis* in *Mythites*, *collaris* in *Dialeptopus*, while *fahrei* is a *nomen nudum*.

Of the remaining species, *insculptus* was described by Bohemann in 1843; *scorio* by Boisduval in 1835 and *stephensi* by Gyllenhal in 1834.

To these species a fourth, *Euomus retusus*, was added by Pascoe in 1872. I do not, however, consider it congeneric with the other members of the genus and have described a new genus—*Euomella*—to receive it. In the present paper one additional species is proposed as new.

As with so many of the genera of the *Euomides*, the affinities of *Euomus* are not obvious. It is possibly closest to *Mythites*, but differs noticeably in general facies, in the structure of head and rostrum, in the prothorax being strongly produced above the head, and in the elytral sculpture.

With the exception of *E. insculptus*, the different species show a bewildering variability of structure, so great that at first sight it would appear as if several additional species ought to be described. I have preferred, however, to err on the side of caution until, at any rate, more is known of the distribution of the different forms.

Table of species.

1	(6)	Submentum bisinuate, not lobate.	
2	(3)	Infra-humeral tubercle absent.	<i>E. insculptus</i> Bohem.
3	(2)	Infra-humeral tubercle present.	
4	(5)	Elytral granules fine.	<i>E. stephensi</i> Gyll.
5	(4)	Elytral granules large, noduliform.	<i>E. nodosus</i> , n.sp.
6	(1)	Submentum with strong median lobe.	<i>E. scorio</i> Bois.

EUOMUS INSCULPTUS Bohem.

Amycterus insculptus Bohem., Schönh., Gen. Spec. Curc., vii. (1), 1843, p. 56; *Euomus id.*, Schönh., Mantissa Sec. Curc., 1847, p. 53 (reference).

♂. Large, robust, elongate, more or less strongly compressed. Black; densely covered with minute brown sub-squamosely pubescence; granules laevigate; setae decumbent black.

Head irregularly set with moderately large, umbilicate setigerous granules; with an oblique, rather indistinct impression on each side of front; supra-ocular margins ridged. Rostrum very short and thick; upper surface slightly depressed, with a short median ridge anteriorly and subparallel ridges at base, extending

base or in front of middle, declivous posteriorly; humeral angles very strongly advanced; dorsum foveate, interstices granulate. Prosternum concave in front of anterior coxae. Venter with a boss-like protuberance on each side of the two basal segments, except in *E. scorio*. Legs rather short and stout. Tarsi short and rather broader, the posterior slightly more elongate.

Genotype, *Amycterus insculptus* Bohemann, 1843.

The genus as described above comprises four species, *insculptus*, *stephensi*, *scorio* and a new species. *E. scorio* might, however, be reasonably regarded as generically distinct from the other three species. It differs in having a somewhat longer rostrum with longer internal ridges and a more strongly projecting clypeal plate; the submentum also is strongly lobate, not merely bisinuate, and there are other minor differences.

Euomus was proposed by Schönherr in 1847 for a group of species previously included in *Amycterus*, the following species being included in the genus: *insculptus*, *nodipennis*, *scorio*, *westwoodi*, *stephensi*, *basalis* and *fahrei*. Of these, *nodipennis* has been placed in *Aedriodes*, *westwoodi* in *Talaurinus*, *basalis* in *Mythites*, *collaris* in *Dialeptopus*, while *fahrei* is a *nomen nudum*.

Of the remaining species, *insculptus* was described by Bohemann in 1843; *scorio* by Boisduval in 1835 and *stephensi* by Gyllenhal in 1834.

To these species a fourth, *Euomus retusus*, was added by Pascoe in 1872. I do not, however, consider it congeneric with the other members of the genus and have described a new genus—*Euomella*—to receive it. In the present paper one additional species is proposed as new.

As with so many of the genera of the *Euomides*, the affinities of *Euomus* are not obvious. It is possibly closest to *Mythites*, but differs noticeably in general facies, in the structure of head and rostrum, in the prothorax being strongly produced above the head, and in the elytral sculpture.

With the exception of *E. insculptus*, the different species show a bewildering variability of structure, so great that at first sight it would appear as if several additional species ought to be described. I have preferred, however, to err on the side of caution until, at any rate, more is known of the distribution of the different forms.

Table of species.

1	(6)	Submentum bisinuate, not lobate.	
2	(3)	Infra-humeral tubercle absent.	<i>E. insculptus</i> Bohem.
3	(2)	Infra-humeral tubercle present.	
4	(5)	Elytral granules fine.	<i>E. stephensi</i> Gyll.
5	(4)	Elytral granules large, noduliform.	<i>E. nodosus</i> , n.sp.
6	(1)	Submentum with strong median lobe.	<i>E. scorio</i> Bois.

EUOMUS INSCULPTUS Bohem.

Amycterus insculptus Bohem., Schönh., Gen. Spec. Curc., vii. (1), 1843, p. 56; *Euomus id.*, Schönh., Mantissa Sec. Curc., 1847, p. 53 (reference).

♂. Large, robust, elongate, more or less strongly compressed. Black; densely covered with minute brown sub-squamose pubescence; granules laevigate; setae decumbent black.

Head irregularly set with moderately large, umbilicate setigerous granules; with an oblique, rather indistinct impression on each side of front; supra-ocular margins ridged. Rostrum very short and thick; upper surface slightly depressed, with a short median ridge anteriorly and subparallel ridges at base, extending

back from the end of the median ridge; lateral margins rather strongly convex in profile, outwardly and backwardly divergent. Scrobes strongly curved, open posteriorly. Prothorax strongly convex antero-posteriorly and from side to side; strongly rounded on sides, the disc passing into the lateral surface without interruption; anterior margin strongly produced above head, with strong ocular lobes; disc with a subapical transverse impression well marked towards the sides, a strongly impressed median line, and an irregular, broad, somewhat ill-defined impression on each side anteriorly; upper surface and sides rather closely set with moderately large round granules, varying somewhat in size. Sides with an oblique impression about middle. Elytra elongate, base widely and deeply emarginate, with humeral angles strongly advanced; apices strongly flanged, emarginate and separately mucronate on each side of suture; disc with a series of large open depressions more or less separated from each other, the intervening ridges and the interstices set with small granules very irregularly arranged, but most numerous and in several rows on the interstices; the first, third and fifth interstices slightly raised, wavy in outline, the others hardly traceable as separate interstices. Sides with similar sculpture. Ventral surface flattened, second segment raised on each side into a distinct boss; all the segments and metasternum granulate, in places rugosely so; apical segment with a slight longitudinal depression on each side. Legs stout, femora and tibiae closely granulate, the granules flattened and almost imbricated; tarsi comparatively short.

♀. Very similar to male, somewhat differently shaped, the elytra being more evenly rounded; ventral surface slightly convex at base. *Dimensions*: ♂. 27 x 9 mm.; ♀. 27 x 10 mm.

Hab.—Western Australia: Perth, Jandakot, Swan River, Champion Bay.

E. insculptus is the largest species of the genus, though occasionally smaller examples may be found. It is also less variable in structure than the other species. The absence of both the infra-humeral and sub-apical tubercles is characteristic, as is also the arrangement of the elytral granules.

EUOMUS STEPHENSI Gyll.

Amycterus stephensi, Gyllenhal, Schönh., Gen. Spec. Cure., ii., 1834, p. 473; Boisduval, Voy. Astrolabe, ii., 1835, p. 388.

Moderately large. Black; more or less densely clothed with brown subsquamose pubescence feebly variegated with grey, the clothing in many specimens discoloured or abraded; median ventral vitta present on metasternum and basal abdominal segment.

Head broad, the front rather flattened with moderately numerous small granules, often obsolete, the margins slightly raised in front of eyes. Rostrum short, wide; much as in *E. insculptus*. Prothorax with disc strongly convex from side to side, the median line depressed, free from granules, a semi-lunar depressed area, outwardly convex, present on each side and without granules; the rest of the dorsal surface with moderately large, discrete granules, extending on to the sides. Elytra widest across infra-humeral tubercles, thence gradually narrowed posteriorly, the apex distinctly flanged on either side and shallowly emarginate in the middle; base widely emarginate, the humeral angles strongly produced outwards and forwards into a distinct crest, a small nodule also present at base of third interstice; sculpture of dorsal surface consisting of large open crateriform depressions, arranged more or less in series, but frequently extending across the interstices; the third, fifth and seventh interstices extremely wavy in

back from the end of the median ridge; lateral margins rather strongly convex in profile, outwardly and backwardly divergent. Scrobes strongly curved, open posteriorly. Prothorax strongly convex antero-posteriorly and from side to side; strongly rounded on sides, the disc passing into the lateral surface without interruption; anterior margin strongly produced above head, with strong ocular lobes; disc with a subapical transverse impression well marked towards the sides, a strongly impressed median line, and an irregular, broad, somewhat ill-defined impression on each side anteriorly; upper surface and sides rather closely set with moderately large round granules, varying somewhat in size. Sides with an oblique impression about middle. Elytra elongate, base widely and deeply emarginate, with humeral angles strongly advanced; apices strongly flanged, emarginate and separately mucronate on each side of suture; disc with a series of large open depressions more or less separated from each other, the intervening ridges and the interstices set with small granules very irregularly arranged, but most numerous and in several rows on the interstices; the first, third and fifth interstices slightly raised, wavy in outline, the others hardly traceable as separate interstices. Sides with similar sculpture. Ventral surface flattened, second segment raised on each side into a distinct boss; all the segments and metasternum granulate, in places rugosely so; apical segment with a slight longitudinal depression on each side. Legs stout, femora and tibiae closely granulate, the granules flattened and almost imbricated; tarsi comparatively short.

♀. Very similar to male, somewhat differently shaped, the elytra being more evenly rounded; ventral surface slightly convex at base. *Dimensions*: ♂. 27 x 9 mm.; ♀. 27 x 10 mm.

Hab.—Western Australia: Perth, Jandakot, Swan River, Champion Bay.

E. insculptus is the largest species of the genus, though occasionally smaller examples may be found. It is also less variable in structure than the other species. The absence of both the infra-humeral and sub-apical tubercles is characteristic, as is also the arrangement of the elytral granules.

EUOMUS STEPHENSI Gyll.

Amycterus stephensi, Gyllenhal, Schönh., Gen. Spec. Cure., ii., 1834, p. 473; Boisduval, Voy. Astrolabe, ii., 1835, p. 388.

Moderately large. Black; more or less densely clothed with brown subsquamose pubescence feebly variegated with grey, the clothing in many specimens discoloured or abraded; median ventral vitta present on metasternum and basal abdominal segment.

Head broad, the front rather flattened with moderately numerous small granules, often obsolete, the margins slightly raised in front of eyes. Rostrum short, wide; much as in *E. insculptus*. Prothorax with disc strongly convex from side to side, the median line depressed, free from granules, a semi-lunar depressed area, outwardly convex, present on each side and without granules; the rest of the dorsal surface with moderately large, discrete granules, extending on to the sides. Elytra widest across infra-humeral tubercles, thence gradually narrowed posteriorly, the apex distinctly flanged on either side and shallowly emarginate in the middle; base widely emarginate, the humeral angles strongly produced outwards and forwards into a distinct crest, a small nodule also present at base of third interstice; sculpture of dorsal surface consisting of large open crateriform depressions, arranged more or less in series, but frequently extending across the interstices; the third, fifth and seventh interstices extremely wavy in

outline, almost circinate, lined by small granules frequently extending on to cross-ridges, more or less absent on the obsolete second, fourth and sixth interstices, which are only indicated occasionally by a small granule at the intersection of the cross-ridges; fifth interstices with a nodulose tubercle half-way down declivity and one or two smaller nodules above this; infra-humeral tubercle on seventh interstice present. Ventral surface concave in the middle of the two basal segments and produced on each side into a distinct boss; the remaining segments flattened, the whole surface granulate, somewhat strigose on the basal segments.

♀. Somewhat fuller in shape with basal ventral segments feebly convex. *Dimensions*: ♂. 18 x 7; ♀. 20 x 9 mm. Range from 15 mm. to 22 mm. in length.

Hab.—Western Australia.

The above description is based on specimens which appear to correspond most closely with the original description, but the series now before me shows striking variations from this which may, perhaps, be regarded as the central form. The variations are often so distinct that one is tempted to regard some of them as specifically different, but the gradations are too many to allow this to be done. Two main types of structure are, however, distinguishable and after prolonged examination and mature consideration, I have thought it advisable to maintain these as specifically distinct, though recognising that one has probably arisen from the other by fusion of separate fine granules into larger nodules.

Under *E. stephensi*, I group all the forms in which the interstices are finely granulate. In this group variation has taken place in the direction of the abasement of the cross reticulations, so that the elytra become broadly sulcate between the first, third, fifth and seventh interstices. Commonly one or two cross-ridges may still appear with one or two granules, generally between the first and third interstices.

A series of specimens from Swan River in the British Museum and others from the same locality in Mr. Clark's collection and my own are of this type and are remarkably constant in their structure. In specimens from Capel River and Kelmescott, the sulcate appearance is even more marked, and there is a tendency for the fine granules to become confluent, particularly on the third interstice which appears costate.

A series from Warren River shows variation in another direction, in that the fine granules on the interstices have become obsolete to a greater or less degree, so that the elytra appear practically non-granulate.

It may be that further series will show that in any one locality the structure is more or less constant; the Warren River and Swan River series suggest this, but specimens are not available from a sufficient number of localities and in sufficient numbers to decide.

While the variation is principally in the elytral sculpture, the extent of the granules on the prothorax also shows variation, while variations occur in size and shape.

EUOMUS NODOSUS, n.sp.

♂. Closely allied to *E. stephensi* Gyll., but differing in the elytral sculpture.

Head and rostrum as in *E. stephensi*. Prothorax similar to that of *E. stephensi*, but with rather more numerous granules. Elytra set with moderately large, noduliform, nitid tubercles, variable in number and position: in the type situated on all the interstices though somewhat larger on the alternate (third, fifth and seventh) ones, in places also present on the cross reticulations; the

outline, almost circinate, lined by small granules frequently extending on to cross-ridges, more or less absent on the obsolete second, fourth and sixth interstices, which are only indicated occasionally by a small granule at the intersection of the cross-ridges; fifth interstices with a nodulose tubercle half-way down declivity and one or two smaller nodules above this; infra-humeral tubercle on seventh interstice present. Ventral surface concave in the middle of the two basal segments and produced on each side into a distinct boss; the remaining segments flattened, the whole surface granulate, somewhat strigose on the basal segments.

♀. Somewhat fuller in shape with basal ventral segments feebly convex. *Dimensions*: ♂. 18 x 7; ♀. 20 x 9 mm. Range from 15 mm. to 22 mm. in length.

Hab.—Western Australia.

The above description is based on specimens which appear to correspond most closely with the original description, but the series now before me shows striking variations from this which may, perhaps, be regarded as the central form. The variations are often so distinct that one is tempted to regard some of them as specifically different, but the gradations are too many to allow this to be done. Two main types of structure are, however, distinguishable and after prolonged examination and mature consideration, I have thought it advisable to maintain these as specifically distinct, though recognising that one has probably arisen from the other by fusion of separate fine granules into larger nodules.

Under *E. stephensi*, I group all the forms in which the interstices are finely granulate. In this group variation has taken place in the direction of the abasement of the cross reticulations, so that the elytra become broadly sulcate between the first, third, fifth and seventh interstices. Commonly one or two cross-ridges may still appear with one or two granules, generally between the first and third interstices.

A series of specimens from Swan River in the British Museum and others from the same locality in Mr. Clark's collection and my own are of this type and are remarkably constant in their structure. In specimens from Capel River and Kelmescott, the sulcate appearance is even more marked, and there is a tendency for the fine granules to become confluent, particularly on the third interstice which appears costate.

A series from Warren River shows variation in another direction, in that the fine granules on the interstices have become obsolete to a greater or less degree, so that the elytra appear practically non-granulate.

It may be that further series will show that in any one locality the structure is more or less constant; the Warren River and Swan River series suggest this, but specimens are not available from a sufficient number of localities and in sufficient numbers to decide.

While the variation is principally in the elytral sculpture, the extent of the granules on the prothorax also shows variation, while variations occur in size and shape.

EUOMUS NODOSUS, n.sp.

♂. Closely allied to *E. stephensi* Gyll., but differing in the elytral sculpture.

Head and rostrum as in *E. stephensi*. Prothorax similar to that of *E. stephensi*, but with rather more numerous granules. Elytra set with moderately large, noduliform, nitid tubercles, variable in number and position: in the type situated on all the interstices though somewhat larger on the alternate (third, fifth and seventh) ones, in places also present on the cross reticulations; the

tubercles not continuous on the interstices but interrupted, those on adjacent interstices and cross-ridges so situated that a series of transverse lines of tubercles is formed running slightly obliquely upwards and outwards across each elytron; infra-humeral tubercle present; sides with similar tubercles. Ventral surface as in *E. stephensi*, but granules and strigosity less marked. *Dimensions*: ♂. 19 x 8 mm.

Hab.—Western Australia.

Described from one of two specimens in my own collection from an unknown locality.

There are before me 10 other specimens in which the elytral sculpture is nodose. These show rather considerable variation *inter se* and from the specimen described above. Most of the specimens are without definite locality and, until long series from known localities are available, it is impossible to regard these variations as entitled even to subspecific rank.

Closely corresponding with the type is a series of four specimens (3 ♂, 1 ♀) without definite locality, in the British Museum collection. The males are slightly smaller and somewhat more attenuate in shape; the nodules are fewer, being absent from the cross reticulations and in places from the intermediate (second and fourth) interstices; the obliquely transverse arrangement is still, however, in evidence. The female agrees closely with the type.

Two females without locality in the South Australian Museum also agree closely with the type; in one the cross arrangement is marked, in the other it is only indicated in places.

All the above agree with the type in having numerous granules on the prothorax. Four specimens before me differ in having fewer granules on the prothorax, there being a wide space between the admedian and lateral groups. The elytral tubercles are fewer than described in the type, and are absent from the fourth and sixth interstices, though present on the second; the transverse arrangement cannot be traced and there is a tendency for the tubercles on the different interstices to be situated alternately.

These four specimens, all of which appear to be males, are from the following localities,—Mt. Barker, Mundaring, King River and Serpentine R. From two of these localities, I possess females which apparently belong to *E. stephensi*. A female from Mundaring is quite a typical *E. stephensi* and shows no evidence of nodule-formation. The female from Mt. Barker, however, while mainly set with fine granules, does show a tendency for these to coalesce into separate nodules, and might quite justifiably be regarded as the other sex of the Mt. Barker male. These Mt. Barker specimens raise doubts as to the specific distinctness of *E. nodosus*, but further specimens from this locality will be required before it can be settled as to whether they form a connecting link between *E. nodosus* and *E. stephensi*, or belong to different species. As stated under *E. stephensi*, I believe that *E. nodosus* has become differentiated through a fusion of the fine granules to form separate nodules which are situated at the nodes of intersection of the cross ridges with the interstices.

EUOMUS SCORPIO Boisdu.

Amycterus scorpio, Boisduval, Voy. Astrolabe, ii., 1835, p. 391, Pl. 7, fig. 15.

Elongate, narrow, greatly compressed from side to side. Black, clothed with minute grey subsquamose pubescence.

Head convex, forehead with granules varying from slightly rugose to

tubercles not continuous on the interstices but interrupted, those on adjacent interstices and cross-ridges so situated that a series of transverse lines of tubercles is formed running slightly obliquely upwards and outwards across each elytron; infra-humeral tubercle present; sides with similar tubercles. Ventral surface as in *E. stephensi*, but granules and strigosity less marked. *Dimensions*: ♂. 19 x 8 mm.

Hab.—Western Australia.

Described from one of two specimens in my own collection from an unknown locality.

There are before me 10 other specimens in which the elytral sculpture is nodose. These show rather considerable variation *inter se* and from the specimen described above. Most of the specimens are without definite locality and, until long series from known localities are available, it is impossible to regard these variations as entitled even to subspecific rank.

Closely corresponding with the type is a series of four specimens (3 ♂, 1 ♀) without definite locality, in the British Museum collection. The males are slightly smaller and somewhat more attenuate in shape; the nodules are fewer, being absent from the cross reticulations and in places from the intermediate (second and fourth) interstices; the obliquely transverse arrangement is still, however, in evidence. The female agrees closely with the type.

Two females without locality in the South Australian Museum also agree closely with the type; in one the cross arrangement is marked, in the other it is only indicated in places.

All the above agree with the type in having numerous granules on the prothorax. Four specimens before me differ in having fewer granules on the prothorax, there being a wide space between the admedian and lateral groups. The elytral tubercles are fewer than described in the type, and are absent from the fourth and sixth interstices, though present on the second; the transverse arrangement cannot be traced and there is a tendency for the tubercles on the different interstices to be situated alternately.

These four specimens, all of which appear to be males, are from the following localities,—Mt. Barker, Mundaring, King River and Serpentine R. From two of these localities, I possess females which apparently belong to *E. stephensi*. A female from Mundaring is quite a typical *E. stephensi* and shows no evidence of nodule-formation. The female from Mt. Barker, however, while mainly set with fine granules, does show a tendency for these to coalesce into separate nodules, and might quite justifiably be regarded as the other sex of the Mt. Barker male. These Mt. Barker specimens raise doubts as to the specific distinctness of *E. nodosus*, but further specimens from this locality will be required before it can be settled as to whether they form a connecting link between *E. nodosus* and *E. stephensi*, or belong to different species. As stated under *E. stephensi*, I believe that *E. nodosus* has become differentiated through a fusion of the fine granules to form separate nodules which are situated at the nodes of intersection of the cross ridges with the interstices.

EUOMUS SCORPIO Boisdu.

Amycterus scorpio, Boisduval, Voy. Astrolabe, ii., 1835, p. 391, Pl. 7, fig. 15.

Elongate, narrow, greatly compressed from side to side. Black, clothed with minute grey subsquamose pubescence.

Head convex, forehead with granules varying from slightly rugose to

obsolescent. Rostrum longer than in other species, with apical plate more strongly exerted; median ridge absent, internal ridges longer, prolonged farther back. Scape longer and more slender. Prothorax of usual shape in genus, with median and sublateral longitudinal impressions; apex with median and ocular lobes strongly produced; dorsum rather closely set with moderate sized round granules; sides granulate. Elytra elongate, narrow, at humeral angles as wide as or slightly narrower than prothorax; apex rounded, feebly flanged, slightly or evidently conjointly mucronate at suture; base strongly emarginate, humeral angles greatly advanced, projecting forwards and outwards. Sculpture of disc variable and irregular, punctures foveiform, inconspicuous; first interstice somewhat raised, except at base, set with fine granules; second, fourth and sixth interstices obsolescent; third raised, wavy in outline, closely set with fine granules, segregated into clumps posteriorly and often fused to form definite tubercles; fifth interstice with fine granules near base, leading into outer border of crest, with isolated tubercles more posteriorly, the last large and constant in position, the others variable in size and number; seventh interstice with irregular granules, infra-humeral tubercle wanting. Lateral interstices irregularly granulate. Ventral surface flattened, with scattered punctures, non-granulate. Tarsi short.

♀. Very similar, ventral surface slightly convex at base; posterior corbels not projecting anteriorly.

Hab.—Western Australia: Albany, Swan R., Jandakot, Serpentine R., Mundaring.

This species is extremely variable in size and sculpture; the series before me (23) varies in size from 13 x 4.5 to 18 x 6 mm. in the male, and from 15 x 5.5 to 21 x 8 mm. in the female. The variations in sculpture are principally in regard to the granulation of the third and fifth interstices. In the least differentiated form the interstices are undulant and finely granulate; the next step appears to be the aggregation of these fine granules into clumps or rosettes, which show a tendency to become separated off, a further step being the elevation of these masses and the fusion of the individual granules. These stages are not, however, sharply marked off from one another, numerous gradations occurring. Commonly the interstices are finely granulate at the base, showing the aggregation process posteriorly. Furthermore, the variation in sculpture seems to have no relation to the size or locality of the specimens.

In the type of the species, now in the National Museum, Paris, the tendency to tubercle formation is well marked.

In the male there is a slight forward projection at the anterior angle of the posterior corbels.

EUOMELLA, n.g.

Size moderate; form elongate, subplanate on dorsal surface, not strongly convex, though moderately deep, strongly declivous posteriorly. Head partially concealed by prothorax, not divided from rostrum above. Rostrum broad, longer than visible portion of head, lateral margins not raised; with two prominent internal ridges at base; apical plate set at extreme apex, exerted. Eyes coarsely faceted. Scrobes curved. Antennae with scape very short, strongly incrassate; funicle with first joint short, second very long, third to sixth short; club ovate. Prothorax angulate-tuberculate on side, produced over head above, with strongly produced ocular lobes almost concealing eyes; disc granulate. Elytra strongly declivous posteriorly; narrow at base, gradually widened to near apex, then suddenly narrowed; apex rounded; base emarginate, the humeral angles ad-

obsolescent. Rostrum longer than in other species, with apical plate more strongly exerted; median ridge absent, internal ridges longer, prolonged farther back. Scape longer and more slender. Prothorax of usual shape in genus, with median and sublateral longitudinal impressions; apex with median and ocular lobes strongly produced; dorsum rather closely set with moderate sized round granules; sides granulate. Elytra elongate, narrow, at humeral angles as wide as or slightly narrower than prothorax; apex rounded, feebly flanged, slightly or evidently conjointly mucronate at suture; base strongly emarginate, humeral angles greatly advanced, projecting forwards and outwards. Sculpture of disc variable and irregular, punctures foveiform, inconspicuous; first interstice somewhat raised, except at base, set with fine granules; second, fourth and sixth interstices obsolescent; third raised, wavy in outline, closely set with fine granules, segregated into clumps posteriorly and often fused to form definite tubercles; fifth interstice with fine granules near base, leading into outer border of crest, with isolated tubercles more posteriorly, the last large and constant in position, the others variable in size and number; seventh interstice with irregular granules, infra-humeral tubercle wanting. Lateral interstices irregularly granulate. Ventral surface flattened, with scattered punctures, non-granulate. Tarsi short.

♀. Very similar, ventral surface slightly convex at base; posterior corbels not projecting anteriorly.

Hab.—Western Australia: Albany, Swan R., Jandakot, Serpentine R., Mundaring.

This species is extremely variable in size and sculpture; the series before me (23) varies in size from 13 x 4.5 to 18 x 6 mm. in the male, and from 15 x 5.5 to 21 x 8 mm. in the female. The variations in sculpture are principally in regard to the granulation of the third and fifth interstices. In the least differentiated form the interstices are undulant and finely granulate; the next step appears to be the aggregation of these fine granules into clumps or rosettes, which show a tendency to become separated off, a further step being the elevation of these masses and the fusion of the individual granules. These stages are not, however, sharply marked off from one another, numerous gradations occurring. Commonly the interstices are finely granulate at the base, showing the aggregation process posteriorly. Furthermore, the variation in sculpture seems to have no relation to the size or locality of the specimens.

In the type of the species, now in the National Museum, Paris, the tendency to tubercle formation is well marked.

In the male there is a slight forward projection at the anterior angle of the posterior corbels.

EUOMELLA, n.g.

Size moderate; form elongate, subplanate on dorsal surface, not strongly convex, though moderately deep, strongly declivous posteriorly. Head partially concealed by prothorax, not divided from rostrum above. Rostrum broad, longer than visible portion of head, lateral margins not raised; with two prominent internal ridges at base; apical plate set at extreme apex, exerted. Eyes coarsely faceted. Scrobes curved. Antennae with scape very short, strongly incrassate; funicle with first joint short, second very long, third to sixth short; club ovate. Prothorax angulate-tuberculate on side, produced over head above, with strongly produced ocular lobes almost concealing eyes; disc granulate. Elytra strongly declivous posteriorly; narrow at base, gradually widened to near apex, then suddenly narrowed; apex rounded; base emarginate, the humeral angles ad-

vanced; disc foveate, with alternate interstices tuberculate.

Genotype: *Euomus retusus* Pasc.

The above genus is formed for the reception of *Euomus retusus* Pascoe. Though allied to *Euomus*, the very different shape of this insect, and the differences in rostrum, eyes, prothorax and elytra render its separation justifiable.

EUOMELLA RETUSA Pasc.

Euomus retusus Pascoe, Journ. Linn. Soc., 1872, p. 449, t. 13, fig. 12.

Elongate, narrow. Black; densely clothed with brownish subpubescence.

Head convex. Rostrum moderately long, broad, the upper surface rather shallowly depressed in middle, with two prominent longitudinal ridges running from a little in front of middle to junction with head, these ridges equidistant from midline and lateral margins; lateral margins not raised, curved downwards at base. Scape very short. Prothorax widest in front of middle, angulate, with a small but prominent tubercle at angulation; apex slightly produced above, ocular lobes partially concealing eyes; disc with a moderately broad median channel with less definite, somewhat irregular, sublateral impressions, the intervening ridge and the sides irregularly set with small rounded granules. Elytra gradually widened from base to level of declivity, thence rounded off rather abruptly; declivity almost perpendicular; base emarginate, third and fifth interstices projecting forwards; disc with rows of rather large, somewhat irregular, open, foveiform punctures; third and fifth interstices with rows of small closely set tubercles, granuliform at base, larger posteriorly and ending at declivity; seventh with infra-humeral tubercle, followed by a row of small granules. Sides with rows of large punctures, the interstices obsoletely granulate. Abdomen flat antero-posteriorly, gently transversely convex, closely set with moderately large punctures. Posterior tarsi rather short. *Dimensions*: ♂. 11 x 5 mm.

Hab.—Western Australia: Champion Bay, Kellerberrin.

Described from the type, which appears to be a male, in the British Museum. I am indebted to Mr. J. Clark for a specimen taken at Kellerberrin by Mr. W. Crawshaw.

MYTHITES.

Schönherr, Mantissa secunda fam. Cure., 1847, p. 11.—*Acanthomus*, Germar, Linn. Ent., iii., 1848, p. 210.

Size moderate to large; elongate. Head convex, forehead marked with longitudinal and oblique impressions; separated from rostrum by a transverse sulcus. Rostrum short and wide; the upper surface deeply sulcate, with long internal ridges; elypeal plate set rather deeply; submentum straight or dentate in middle; scrobes curved. Antennae with a moderately short, stout scape; funicular joints short. Prothorax more or less strongly rounded on sides; apical margin subtruncate above or feebly rounded, not produced; ocular lobes present; dorsum granulate. Elytra elongate, in many species strongly convex and robust; humeral angles produced or rounded; dorsum foveo-punctate; interstices granulate, tuberculate or subcostate. Venter flattened in ♂, feebly convex in ♀. Legs rather short; tarsi short, the posterior slightly longer.

Genotype, *Mythites tuberculatus* Lea, designated by Schönherr, but not described.

This genus appears to approach most nearly of all the Euomides to the Amycterides vrais of Lacordaire, though its immediate affinities are undoubtedly

vanced; disc foveate, with alternate interstices tuberculate.

Genotype: *Euomus retusus* Pasc.

The above genus is formed for the reception of *Euomus retusus* Pascoe. Though allied to *Euomus*, the very different shape of this insect, and the differences in rostrum, eyes, prothorax and elytra render its separation justifiable.

EUOMELLA RETUSA Pasc.

Euomus retusus Pascoe, Journ. Linn. Soc., 1872, p. 449, t. 13, fig. 12.

Elongate, narrow. Black; densely clothed with brownish subpubescence.

Head convex. Rostrum moderately long, broad, the upper surface rather shallowly depressed in middle, with two prominent longitudinal ridges running from a little in front of middle to junction with head, these ridges equidistant from midline and lateral margins; lateral margins not raised, curved downwards at base. Scape very short. Prothorax widest in front of middle, angulate, with a small but prominent tubercle at angulation; apex slightly produced above, ocular lobes partially concealing eyes; disc with a moderately broad median channel with less definite, somewhat irregular, sublateral impressions, the intervening ridge and the sides irregularly set with small rounded granules. Elytra gradually widened from base to level of declivity, thence rounded off rather abruptly; declivity almost perpendicular; base emarginate, third and fifth interstices projecting forwards; disc with rows of rather large, somewhat irregular, open, foveiform punctures; third and fifth interstices with rows of small closely set tubercles, granuliform at base, larger posteriorly and ending at declivity; seventh with infra-humeral tubercle, followed by a row of small granules. Sides with rows of large punctures, the interstices obsoletely granulate. Abdomen flat antero-posteriorly, gently transversely convex, closely set with moderately large punctures. Posterior tarsi rather short. *Dimensions*: ♂. 11 x 5 mm.

Hab.—Western Australia: Champion Bay, Kellerberrin.

Described from the type, which appears to be a male, in the British Museum. I am indebted to Mr. J. Clark for a specimen taken at Kellerberrin by Mr. W. Crawshaw.

MYTHITES.

Schönherr, Mantissa secunda fam. Cure., 1847, p. 11.—*Acanthomus*, Germar, Linn. Ent., iii., 1848, p. 210.

Size moderate to large; elongate. Head convex, forehead marked with longitudinal and oblique impressions; separated from rostrum by a transverse sulcus. Rostrum short and wide; the upper surface deeply sulcate, with long internal ridges; elypeal plate set rather deeply; submentum straight or dentate in middle; scrobes curved. Antennae with a moderately short, stout scape; funicular joints short. Prothorax more or less strongly rounded on sides; apical margin subtruncate above or feebly rounded, not produced; ocular lobes present; dorsum granulate. Elytra elongate, in many species strongly convex and robust; humeral angles produced or rounded; dorsum foveo-punctate; interstices granulate, tuberculate or subcostate. Venter flattened in ♂, feebly convex in ♀. Legs rather short; tarsi short, the posterior slightly longer.

Genotype, *Mythites tuberculatus* Lea, designated by Schönherr, but not described.

This genus appears to approach most nearly of all the Euomides to the Amycterides vrais of Lacordaire, though its immediate affinities are undoubtedly

with the present group. In many respects it would appear to be closest to the archetype of the subfamily.

The generic description is chiefly an enumeration of characters common to many other genera and its claim to generic rank would almost appear to be a lack of the distinctive features such as characterise the other Euomid genera. The deeply set clypeal plate is, however, distinctive and would appear to indicate a relation with *Talaurinus*. The rostrum is constricted at the base, being considerably wider apically. This character separates it from the genus *Bubaris* in which the rostrum is widened posteriorly. From *Euomus* it differs in the rostral sculpture and in not having the prothorax produced above the head; the general shape is also different.

The genus is readily divided into two groups which differ in shape and in the arrangement of the tubercles at the apex of the declivity. In the first subgroup the shape is subcylindrical and robust, in the second there is a distinct tendency towards flattening of the dorsal surface. In the first subgroup the tubercle on the third interstice is placed some little distance above the declivity, whereas in the second there is an oblique line of tubercles across the edge of the declivity on each elytron. I have alluded to these groups as the *tuberculatus* and *asperatus* subgroups. It is possible that these groups should be separated generically and support is lent to this by the geographical distribution. Two other features deserve special mention; in the majority of the species the first and third interstices are distinct at the base, in *basalis* and two other species the two interstices are united. The humeral angles are as a rule advanced in both sexes; in two species these angles are rounded in the female.

The genus *Mythites* was formed by Schönherr (1847) for a species to which he gave the name *M. tuberculatus*, but of which he did not give a description. The species—the only one of the genus known to occur in Tasmania—was many years later described by Lea (1910) under the same name.

Of the species described prior to 1847 under *Amycterus*, only one—*A. basalis* Boisdual (1835)—is referable to the genus *Mythites*. It is rather strange that Schönherr should have referred this species to *Euomus* rather than to *Mythites*.

In 1848, Germar erected the genus *Acanthomus* for two South Australian species—*sulcicollis* and *perfossus*. The synonymy of *Acanthomus* with *Mythites* was pointed out by Lacordaire (1863) who, however, wrongly regarded *tuberculatus* and *sulcicollis* as the same.

Pascoe in 1872 (Ann. Nat. Hist., pp. 84-5) added three species—*asperatus*, *degener* and *pithecius*—to the genus. Subsequently (1882) he removed *pithecius* to *Bubaris*. In the present paper I place *degener* as a synonym of *perfossus* Germar.

In 1910 Lea added 4 species: *frater*, *poropteroides* and *foveipennis* (Trans. Roy. Soc. S. Aust., xxxiv.), and *granulatus* (Mém. Soc. entom. Belgique, xviii.). He also described *M. tuberculatus* (Mitt. Zool. Mus., Berlin).

In the present paper I have added the names of four new species and of two varieties.

One or two other species, of which I have seen single examples, still await description.

Distribution.—Unlike most of the genera of the group, *Mythites* possesses a wide distribution, from Western Australia to Queensland. One species—*basalis*—is common in Western Australia and extends into South Australia. In the latter State two other species—*sulcicollis* and *degener*—occur, while *tuberculatus*, which is found in Tasmania and Victoria, also extends into South Australia.

with the present group. In many respects it would appear to be closest to the archetype of the subfamily.

The generic description is chiefly an enumeration of characters common to many other genera and its claim to generic rank would almost appear to be a lack of the distinctive features such as characterise the other Euomid genera. The deeply set clypeal plate is, however, distinctive and would appear to indicate a relation with *Talaurinus*. The rostrum is constricted at the base, being considerably wider apically. This character separates it from the genus *Bubaris* in which the rostrum is widened posteriorly. From *Euomus* it differs in the rostral sculpture and in not having the prothorax produced above the head; the general shape is also different.

The genus is readily divided into two groups which differ in shape and in the arrangement of the tubercles at the apex of the declivity. In the first subgroup the shape is subcylindrical and robust, in the second there is a distinct tendency towards flattening of the dorsal surface. In the first subgroup the tubercle on the third interstice is placed some little distance above the declivity, whereas in the second there is an oblique line of tubercles across the edge of the declivity on each elytron. I have alluded to these groups as the *tuberculatus* and *asperatus* subgroups. It is possible that these groups should be separated generically and support is lent to this by the geographical distribution. Two other features deserve special mention; in the majority of the species the first and third interstices are distinct at the base, in *basalis* and two other species the two interstices are united. The humeral angles are as a rule advanced in both sexes; in two species these angles are rounded in the female.

The genus *Mythites* was formed by Schönherr (1847) for a species to which he gave the name *M. tuberculatus*, but of which he did not give a description. The species—the only one of the genus known to occur in Tasmania—was many years later described by Lea (1910) under the same name.

Of the species described prior to 1847 under *Amycterus*, only one—*A. basalis* Boisdual (1835)—is referable to the genus *Mythites*. It is rather strange that Schönherr should have referred this species to *Euomus* rather than to *Mythites*.

In 1848, Germar erected the genus *Acanthomus* for two South Australian species—*sulcicollis* and *perfossus*. The synonymy of *Acanthomus* with *Mythites* was pointed out by Lacordaire (1863) who, however, wrongly regarded *tuberculatus* and *sulcicollis* as the same.

Pascoe in 1872 (Ann. Nat. Hist., pp. 84-5) added three species—*asperatus*, *degener* and *pithecius*—to the genus. Subsequently (1882) he removed *pithecius* to *Bubaris*. In the present paper I place *degener* as a synonym of *perfossus* Germar.

In 1910 Lea added 4 species: *frater*, *poropteroides* and *foveipennis* (Trans. Roy. Soc. S. Aust., xxxiv.), and *granulatus* (Mém. Soc. entom. Belgique, xviii.). He also described *M. tuberculatus* (Mitt. Zool. Mus., Berlin).

In the present paper I have added the names of four new species and of two varieties.

One or two other species, of which I have seen single examples, still await description.

Distribution.—Unlike most of the genera of the group, *Mythites* possesses a wide distribution, from Western Australia to Queensland. One species—*basalis*—is common in Western Australia and extends into South Australia. In the latter State two other species—*sulcicollis* and *degener*—occur, while *tuberculatus*, which is found in Tasmania and Victoria, also extends into South Australia.

Victoria possesses three species—*tuberculatus*, *poropteroides*, and *granulatus*—and Tasmania only one—*tuberculatus*. The above mentioned species, with one exception—*granulatus*—belong to the *tuberculatus* subgroup. In New South Wales eight species occur, only two of which belong to the *tuberculatus* subgroup, the remainder belonging to the *asperatus* subgroup. Queensland has a single representative, described herein and occurring also in N.S. Wales. It is a member of the second subgroup; the first is, however, represented by at least two undescribed species. The difference in the distribution of the two subgroups is striking—the first coextensive with the range of the genus, the second confined to the eastern side of the continent—and is in itself strong argument for the generic separation of the subgroups.

Table of Species.

- 1 (12) Apical tubercle of third interstice placed well anterior to edge of declivity; comparatively large, robust species. (*tuberculatus* subgroup).
- 2 (7) First and third interstices united at base.
- 3 (6) Humeral angles produced in both sexes.
- 4 (5) Forehead with four longitudinal ridges; size large. . . . *M. basalis* Boisd.
- 5 (4) Forehead with a single median ridge, and one above each eye; size small. *M. perfossus* Germar.
- 6 (3) Humeral angles rounded, at least in female. . . . *M. poropteroides* Lea.
- 7 (2) First and third interstices separate at base.
- 8 (11) Humeral angles produced in both sexes.
- 9 (10) Prothorax set with small discrete granules, with a single median sulcus. *M. sulcicollis* Germ.
- 10 (9) Prothorax with granules fused into large laevigate elevations separated by oblique sulci. *M. frater* Lea.
- 11 (8) Humeral angles produced in ♂, rounded in ♀. . . . *M. tuberculatus* Lea.
- 12 (1) Elytra with an oblique row of tubercles across edge of declivity on each side; more elongate, subplanate species. (*asperatus* subgroup).
- 13 (16) Prothoracic granules fine, regularly disposed; forehead with 3 more or less distinct ridges on either side of median line.
- 14 (15) Interstices non-granulate. *M. foveipennis* Lea.
- 15 (14) Interstices finely granulate. *M. granulatus* Lea.
- 16 (13) Prothoracic granules small, but distinctly larger than in last two species.
- 17 (18) Forehead with 4 distinct ridges on each side of median line. *M. rugosus*, n.sp.
- 18 (17) Forehead with 2, occasionally 3, ridges on each side of median line.
- 19 (22) Prothorax regularly granulate; elytral foveae of relatively equal depth.
- 20 (21) Interstices somewhat irregular, often broken, distinctly granulate. *M. asperatus* Pasc.
- 21 (20) Interstices entire, more regular, obsoletely granulate. . . *M. montanus*, n.sp.
- 22 (19) Prothorax more rugosely sculptured; elytra with foveae of varying depth, mostly comparatively shallow, with several larger and deeper depressions.
- 23 (24) Median line of forehead sulcate; no infra-humeral tubercle. *M. coxi*, n.sp.
- 24 (23) Median line of forehead carinate; an infra-humeral tubercle present. *arboricola*, n.sp.

MYTHITES BASALIS Boisduval.

Amycterus basalis, Boisd., Voy. de l'Astrolabe ii., 1835, p. 390.—*Mythites basalis* (Boisd.) Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 24.

Large, robust, subcylindrical. Black, subnitid; with scanty yellowish-brown clothing in depressions.

Head convex; forehead with four longitudinal ridges, separated by narrow

Victoria possesses three species—*tuberculatus*, *poropteroides*, and *granulatus*—and Tasmania only one—*tuberculatus*. The above mentioned species, with one exception—*granulatus*—belong to the *tuberculatus* subgroup. In New South Wales eight species occur, only two of which belong to the *tuberculatus* subgroup, the remainder belonging to the *asperatus* subgroup. Queensland has a single representative, described herein and occurring also in N.S. Wales. It is a member of the second subgroup; the first is, however, represented by at least two undescribed species. The difference in the distribution of the two subgroups is striking—the first coextensive with the range of the genus, the second confined to the eastern side of the continent—and is in itself strong argument for the generic separation of the subgroups.

Table of Species.

- 1 (12) Apical tubercle of third interstice placed well anterior to edge of declivity; comparatively large, robust species. (*tuberculatus* subgroup).
- 2 (7) First and third interstices united at base.
- 3 (6) Humeral angles produced in both sexes.
- 4 (5) Forehead with four longitudinal ridges; size large. . . . *M. basalis* Boisd.
- 5 (4) Forehead with a single median ridge, and one above each eye; size small. *M. perfossus* Germar.
- 6 (3) Humeral angles rounded, at least in female. . . . *M. poropteroides* Lea.
- 7 (2) First and third interstices separate at base.
- 8 (11) Humeral angles produced in both sexes.
- 9 (10) Prothorax set with small discrete granules, with a single median sulcus. *M. sulcicollis* Germ.
- 10 (9) Prothorax with granules fused into large laevigate elevations separated by oblique sulci. *M. frater* Lea.
- 11 (8) Humeral angles produced in ♂, rounded in ♀. . . . *M. tuberculatus* Lea.
- 12 (1) Elytra with an oblique row of tubercles across edge of declivity on each side; more elongate, subplanate species. (*asperatus* subgroup).
- 13 (16) Prothoracic granules fine, regularly disposed; forehead with 3 more or less distinct ridges on either side of median line.
- 14 (15) Interstices non-granulate. *M. foveipennis* Lea.
- 15 (14) Interstices finely granulate. *M. granulatus* Lea.
- 16 (13) Prothoracic granules small, but distinctly larger than in last two species.
- 17 (18) Forehead with 4 distinct ridges on each side of median line. *M. rugosus*, n.sp.
- 18 (17) Forehead with 2, occasionally 3, ridges on each side of median line.
- 19 (22) Prothorax regularly granulate; elytral foveae of relatively equal depth.
- 20 (21) Interstices somewhat irregular, often broken, distinctly granulate. *M. asperatus* Pasc.
- 21 (20) Interstices entire, more regular, obsoletely granulate. . . *M. montanus*, n.sp.
- 22 (19) Prothorax more rugosely sculptured; elytra with foveae of varying depth, mostly comparatively shallow, with several larger and deeper depressions.
- 23 (24) Median line of forehead sulcate; no infra-humeral tubercle. *M. coxi*, n.sp.
- 24 (23) Median line of forehead carinate; an infra-humeral tubercle present. *arboricola*, n.sp.

MYTHITES BASALIS Boisduval.

Amycterus basalis, Boisd., Voy. de l'Astrolabe ii., 1835, p. 390.—*Mythites basalis* (Boisd.) Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 24.

Large, robust, subcylindrical. Black, subnitid; with scanty yellowish-brown clothing in depressions.

Head convex; forehead with four longitudinal ridges, separated by narrow

sulci, the median sulcus sometimes reduced. Rostrum moderately long, excavate above, the internal ridges long, prominent, only slightly convergent at base; external margins rather strongly curved downwards at base. Scrobes curved. Antennae with scape moderately long; funicle with first joint longer than the others, the last 4 transverse; club truncate at base. Eyes large, ovate. Prothorax slightly longer than wide, rounded on sides, widest in front of middle, strongly convex. Apical margin somewhat produced above, with well marked though obtuse ocular lobes. Disc with a deep though somewhat irregular anterior transverse impression, a deeply impressed median sulcus, a slightly less marked sub-lateral longitudinal impression and a deep oblique sulcus from transverse impression to base of median line; the median impression bordered by a raised ridge expanded in middle between the anterior and the oblique impressions; the surface of the ridges with setigerous punctures, the rest of the disc between the sulci set with setigero-punctate confluent granules, the outlines of the individual granules often indistinct; a similar mass of confluent granules forming the lateral margin, laevigate on the lateral aspect, below which the sides are granulate. Elytra elongate, very little widened on sides, widest across anterior ends of the 7th interstice; apex rounded; base with strongly advanced humeral angles, and with a forward projection formed by the conjoined ends of the first and third interstices. Disc with fairly regular rows of open punctures, separated above and below by low ridges and not confluent laterally; second, fourth and sixth interstices low but traceable; first costiform at base and outwardly turned to join base of third interstice; second with a single large tubercle at summit of declivity; third interstice raised, costiform from base to about middle, thence broken into one or two separate tubercles, the apical situated above declivity some distance anterior to tubercle on second interstice; fifth costiform at base, where it arises from humeral crest, and for about a third of its length, thence broken into separate tubercles, the last situated about on same level with last on third interstice; seventh arising abruptly behind and below shoulder in a rather obtuse swollen nodule, followed by a row of somewhat nodose tubercles; lateral interstices with small rounded tubercles, the upper interstices crossed by more or less evident vertical impressions connecting the punctures, these impressions more distinct in some specimens than in others. Ventral surface lightly transversely convex, the individual segments also lightly longitudinally convex, the apical segment more swollen; median vitta brown, extending from metasternum to second visible segment, thence represented by scanty yellow depressed pubescence. Tibiae short and robust; tarsi short.

♀. Resembles male, but broader and more robust; ventral surface convex and without median vitta. *Dimensions*: ♂. 15 x 6 mm.; ♀. 17 x 7 mm.

Hab.—Western Australia: Upper Capel River, Kellerberrin; South Australia.

This species, which appears to be the commonest in Western Australia, has been regarded as that described by Boisduval and corresponds well with his description, though the size given (6 lines) is somewhat smaller.

A number of allied forms also occur in Western Australia and have generally been placed under *basalis*. Two of these forms are here described as constituting distinct varieties or subspecies. Two other specimens before me exhibit variations from the above description, but as these may be individual variations, I have not described them as distinct, merely indicating the points of divergence.

♀. King George Sound. Smaller and narrower, with elytral sculpture more

sulci, the median sulcus sometimes reduced. Rostrum moderately long, excavate above, the internal ridges long, prominent, only slightly convergent at base; external margins rather strongly curved downwards at base. Scrobes curved. Antennae with scape moderately long; funicle with first joint longer than the others, the last 4 transverse; club truncate at base. Eyes large, ovate. Prothorax slightly longer than wide, rounded on sides, widest in front of middle, strongly convex. Apical margin somewhat produced above, with well marked though obtuse ocular lobes. Disc with a deep though somewhat irregular anterior transverse impression, a deeply impressed median sulcus, a slightly less marked sub-lateral longitudinal impression and a deep oblique sulcus from transverse impression to base of median line; the median impression bordered by a raised ridge expanded in middle between the anterior and the oblique impressions; the surface of the ridges with setigerous punctures, the rest of the disc between the sulci set with setigero-punctate confluent granules, the outlines of the individual granules often indistinct; a similar mass of confluent granules forming the lateral margin, laevigate on the lateral aspect, below which the sides are granulate. Elytra elongate, very little widened on sides, widest across anterior ends of the 7th interstice; apex rounded; base with strongly advanced humeral angles, and with a forward projection formed by the conjoined ends of the first and third interstices. Disc with fairly regular rows of open punctures, separated above and below by low ridges and not confluent laterally; second, fourth and sixth interstices low but traceable; first costiform at base and outwardly turned to join base of third interstice; second with a single large tubercle at summit of declivity; third interstice raised, costiform from base to about middle, thence broken into one or two separate tubercles, the apical situated above declivity some distance anterior to tubercle on second interstice; fifth costiform at base, where it arises from humeral crest, and for about a third of its length, thence broken into separate tubercles, the last situated about on same level with last on third interstice; seventh arising abruptly behind and below shoulder in a rather obtuse swollen nodule, followed by a row of somewhat nodose tubercles; lateral interstices with small rounded tubercles, the upper interstices crossed by more or less evident vertical impressions connecting the punctures, these impressions more distinct in some specimens than in others. Ventral surface lightly transversely convex, the individual segments also lightly longitudinally convex, the apical segment more swollen; median vitta brown, extending from metasternum to second visible segment, thence represented by scanty yellow depressed pubescence. Tibiae short and robust; tarsi short.

♀. Resembles male, but broader and more robust; ventral surface convex and without median vitta. *Dimensions*: ♂. 15 x 6 mm.; ♀. 17 x 7 mm.

Hab.—Western Australia: Upper Capel River, Kellerberrin; South Australia.

This species, which appears to be the commonest in Western Australia, has been regarded as that described by Boisduval and corresponds well with his description, though the size given (6 lines) is somewhat smaller.

A number of allied forms also occur in Western Australia and have generally been placed under *basalis*. Two of these forms are here described as constituting distinct varieties or subspecies. Two other specimens before me exhibit variations from the above description, but as these may be individual variations, I have not described them as distinct, merely indicating the points of divergence.

♀. King George Sound. Smaller and narrower, with elytral sculpture more

rugulose, and punctures larger, more open and foveiform and less regular. *Dimensions*: 14 x 5 mm.

♀. Swan River. Very large and correspondingly broad, with prothorax wider than long (6 x 7 mm.). Sculpture not differing from usual form. *Dimensions*: ♀. 23 x 10 mm. In the typical form the thorax is as wide as long (5 x 5 mm.).

Var. *NODOSUS*, n.var.—♂. Large, robust; black, subnitid, with fine yellowish-brown subpubescence in depressions.

Head with the two median longitudinal ridges partially fused, leaving a central fovea. Rostrum as in typical specimens, except that the internal ridges are somewhat more raised and laevigate. Prothorax slightly transverse, with anterior and sublateral impressions less marked, but the median and oblique sulci well defined; admedian ridges similar but more laevigate, the rest of the surface with rather large, round, discrete, laevigate granules not confounded in groups, except at lateral margin where they are partially fused; sides with discrete granules similar to those on disc. Elytra oblong, comparatively broad, almost parallel-sided; base with humeral angles strongly advanced; first and third interstices conjoined at base and advanced; disc with punctures more open, foveiform, often confluent with those of adjacent series, the depressions extending across and breaking up the interstices; first interstice thickened and out-turned at base to join base of third; second with a single tubercle below summit of declivity; third broken up into a row of large separate tubercles, rounded and nodose at base, more conical towards apex, the last situated above the tubercle on second interstice; fifth interstice with a similar row of a few tubercles ending some distance anteriorly to apical tubercle of third interstice; seventh with a row of somewhat transverse smooth tubercles, extending from a round laevigate infra-humeral tubercle posteriorly to the level of the tubercle on the second interstice, the individual tubercles separated by vertical furrows, extending on to the sides; lateral interstices with smaller nodules. Ventral surface with a median vitta of long ochreous hair extending from metasternum to apical segment of abdomen, the hairs shorter on the last three segments; individual segments convex from before backwards, the apical segment more strongly convex, with a median impression filled by the hairs of the vitta. Legs as in typical specimens of *M. basalis*, but proportionally thicker.

♀. As in ♂, but ventral surface more convex, median vitta thinner, composed of short hairs, not extending on to apical segment. *Dimensions*: ♂. 20 x 8.5 mm.; ♀. 20 x 9.5 mm.

Hab.—Western Australia: Yalgoo, Cue.

I should have regarded *nodosus* as a good species but for the existence of specimens that seem almost exactly intermediate. Thus a male from Ankertell and a female from Swan River have the prothoracic granules arranged into groups as in *M. basalis*, while the elytral sculpture is similar to *nodosus*, though the tubercles are smaller, particularly on the lateral interstices; the punctures also are smaller and more irregular.

Var. *OBLITERATUS*, n.var. ♀. Large; black, subopaque; with scanty yellow clothing in depressions.

Head and rostrum as in *nodosus*. Prothorax much as in *nodosus*, but the elevations on each side of median line not laevigate, but somewhat fissured, the rest of the surface granulate as in *nodosus*, but the granules slightly depressed and not laevigate. Elytra with regular rows of small foveiform punctures, well

rugulose, and punctures larger, more open and foveiform and less regular. *Dimensions*: 14 x 5 mm.

♀. Swan River. Very large and correspondingly broad, with prothorax wider than long (6 x 7 mm.). Sculpture not differing from usual form. *Dimensions*: ♀. 23 x 10 mm. In the typical form the thorax is as wide as long (5 x 5 mm.).

Var. *NODOSUS*, n.var.—♂. Large, robust; black, subnitid, with fine yellowish-brown subpubescence in depressions.

Head with the two median longitudinal ridges partially fused, leaving a central fovea. Rostrum as in typical specimens, except that the internal ridges are somewhat more raised and laevigate. Prothorax slightly transverse, with anterior and sublateral impressions less marked, but the median and oblique sulci well defined; admedian ridges similar but more laevigate, the rest of the surface with rather large, round, discrete, laevigate granules not confounded in groups, except at lateral margin where they are partially fused; sides with discrete granules similar to those on disc. Elytra oblong, comparatively broad, almost parallel-sided; base with humeral angles strongly advanced; first and third interstices conjoined at base and advanced; disc with punctures more open, foveiform, often confluent with those of adjacent series, the depressions extending across and breaking up the interstices; first interstice thickened and out-turned at base to join base of third; second with a single tubercle below summit of declivity; third broken up into a row of large separate tubercles, rounded and nodose at base, more conical towards apex, the last situated above the tubercle on second interstice; fifth interstice with a similar row of a few tubercles ending some distance anteriorly to apical tubercle of third interstice; seventh with a row of somewhat transverse smooth tubercles, extending from a round laevigate infra-humeral tubercle posteriorly to the level of the tubercle on the second interstice, the individual tubercles separated by vertical furrows, extending on to the sides; lateral interstices with smaller nodules. Ventral surface with a median vitta of long ochreous hair extending from metasternum to apical segment of abdomen, the hairs shorter on the last three segments; individual segments convex from before backwards, the apical segment more strongly convex, with a median impression filled by the hairs of the vitta. Legs as in typical specimens of *M. basalis*, but proportionally thicker.

♀. As in ♂, but ventral surface more convex, median vitta thinner, composed of short hairs, not extending on to apical segment. *Dimensions*: ♂. 20 x 8.5 mm.; ♀. 20 x 9.5 mm.

Hab.—Western Australia: Yalgoo, Cue.

I should have regarded *nodosus* as a good species but for the existence of specimens that seem almost exactly intermediate. Thus a male from Ankertell and a female from Swan River have the prothoracic granules arranged into groups as in *M. basalis*, while the elytral sculpture is similar to *nodosus*, though the tubercles are smaller, particularly on the lateral interstices; the punctures also are smaller and more irregular.

Var. *OBLITERATUS*, n.var. ♀. Large; black, subopaque; with scanty yellow clothing in depressions.

Head and rostrum as in *nodosus*. Prothorax much as in *nodosus*, but the elevations on each side of median line not laevigate, but somewhat fissured, the rest of the surface granulate as in *nodosus*, but the granules slightly depressed and not laevigate. Elytra with regular rows of small foveiform punctures, well

separated from each other and from those of adjacent series; all the interstices traceable in their entirety, little elevated, the third, fifth and seventh more so than the others; first out-turned at base to join third; second with a small tubercle near summit of declivity; third and fifth showing a tendency to break up into separate tubercles, more distinct on the posterior portion of the interstices; seventh with a row of rather low rounded tubercles, extending from a small infra-humeral tubercle; lateral interstices with small granules. Venter convex; no median vitta present; apical segment with a transverse furrow at extreme apex. *Dimensions*: ♀. 20 x 9 mm.

Hab.—Western Australia.

MYTHITES PERFOSSUS Germ.

Acanthomus perfossus, Germar, Linn. Ent., in., 1848, p. 210.—*Mythites degener*, Pascoe, Ann. Nat. Hist., 1872, p. 85.

♂. Small, elongate-ovate. Black; with obscure subsetose brown pubescence in depressions; ventral surface with a tawny hirsute median vitta.

Head rather strongly convex, separated from rostrum by a transverse groove; forehead with a median ridge bounded by a moderately deep groove on each side, and with a ridge above eyes, ending opposite bifurcation of rostral ridges. Rostrum subcylindrical, narrower than head; upper surface with a deep median sulcus, bounded by a raised ridge on each side, the ridges slightly outwardly curved at each end, feebly bifurcate at base, almost rectangular anteriorly; apical plate set slightly in front of anterior ends of ridges. Scrobes looking upward and outwards, rather strongly curved, extending to eyes, but separated by a furrow. Antennae with scape comparatively short and stout; funicular joints small, first slightly elongate, second and third sub-quadrate, fourth, fifth and sixth slightly transverse. Eyes large, ovate, partially concealed by ocular lobes. Prothorax very similar to *M. sulcicollis*, with a deep median groove, the rest of the surface set with small, somewhat obscure granules. Elytra elongate, little widened posteriorly; base with humeral angles moderately strongly produced, and ends of third interstices less strongly so; disc with moderately regular rows of open foveiform punctures; first interstice hardly raised, but out-turned at base to join third interstice; second obsolete, except for a strong conical apical tubercle at edge of declivity; third interstice with granules conjoined to form a low ridge extending from base to beyond middle, and followed by a larger isolated tubercle above declivity; fourth interstice obsolete; fifth interstice represented by a slightly raised, somewhat interrupted ridge, without definite tubercles, not reaching declivity, but produced at base to form the humeral angles; seventh interstice with a subobsolete infra-humeral tubercle followed by an ill-defined row of granules, ending in two or three rather feeble tubercles. Ventral surface with rather sparse setigerous punctures.

♀. Similar, but more ovate; ventral surface convex without median vitta. *Dimensions*: ♂. 10.5 x 4 mm.; ♀. 14 x 5.5 mm.

Hab.—South Australia: Port Lincoln.

The above description was drawn up from the types of *M. degener* Pase. in the British Museum. That the species is the same as *Acanthomus perfossus* Germar, I feel certain, after comparing specimens from Port Lincoln with Germar's description.

separated from each other and from those of adjacent series; all the interstices traceable in their entirety, little elevated, the third, fifth and seventh more so than the others; first out-turned at base to join third; second with a small tubercle near summit of declivity; third and fifth showing a tendency to break up into separate tubercles, more distinct on the posterior portion of the interstices; seventh with a row of rather low rounded tubercles, extending from a small infra-humeral tubercle; lateral interstices with small granules. Venter convex; no median vitta present; apical segment with a transverse furrow at extreme apex. *Dimensions*: ♀. 20 x 9 mm.

Hab.—Western Australia.

MYTHITES PERFOSSUS Germ.

Acanthomus perfossus, Germar, Linn. Ent., in., 1848, p. 210.—*Mythites degener*, Pascoe, Ann. Nat. Hist., 1872, p. 85.

♂. Small, elongate-ovate. Black; with obscure subsetose brown pubescence in depressions; ventral surface with a tawny hirsute median vitta.

Head rather strongly convex, separated from rostrum by a transverse groove; forehead with a median ridge bounded by a moderately deep groove on each side, and with a ridge above eyes, ending opposite bifurcation of rostral ridges. Rostrum subcylindrical, narrower than head; upper surface with a deep median sulcus, bounded by a raised ridge on each side, the ridges slightly outwardly curved at each end, feebly bifurcate at base, almost rectangular anteriorly; apical plate set slightly in front of anterior ends of ridges. Scrobes looking upward and outwards, rather strongly curved, extending to eyes, but separated by a furrow. Antennae with scape comparatively short and stout; funicular joints small, first slightly elongate, second and third sub-quadrate, fourth, fifth and sixth slightly transverse. Eyes large, ovate, partially concealed by ocular lobes. Prothorax very similar to *M. sulcicollis*, with a deep median groove, the rest of the surface set with small, somewhat obscure granules. Elytra elongate, little widened posteriorly; base with humeral angles moderately strongly produced, and ends of third interstices less strongly so; disc with moderately regular rows of open foveiform punctures; first interstice hardly raised, but out-turned at base to join third interstice; second obsolete, except for a strong conical apical tubercle at edge of declivity; third interstice with granules conjoined to form a low ridge extending from base to beyond middle, and followed by a larger isolated tubercle above declivity; fourth interstice obsolete; fifth interstice represented by a slightly raised, somewhat interrupted ridge, without definite tubercles, not reaching declivity, but produced at base to form the humeral angles; seventh interstice with a subobsolete infra-humeral tubercle followed by an ill-defined row of granules, ending in two or three rather feeble tubercles. Ventral surface with rather sparse setigerous punctures.

♀. Similar, but more ovate; ventral surface convex without median vitta. *Dimensions*: ♂. 10.5 x 4 mm.; ♀. 14 x 5.5 mm.

Hab.—South Australia: Port Lincoln.

The above description was drawn up from the types of *M. degener* Pase. in the British Museum. That the species is the same as *Acanthomus perfossus* Germar, I feel certain, after comparing specimens from Port Lincoln with Germar's description.

MYTHITES POROPTEROIDES Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 22.

I am indebted to Mr. Lea for an opportunity of inspecting the unique type (♀) of this species.

The conjoined anterior ends of the first and third interstices would ally the species to *M. basalis* and *M. perfossus*, but from both it may be separated by the rounded shoulders and the subapical pair of tubercles. These tubercles are situated on each side of the suture, almost touching each other and about two-thirds of the way down the declivity. The apex of the elytra is also very strongly produced.

Hab.—Victoria: Geelong.

MYTHITES SULCICOLLIS Germ.

Acanthomus sulcicollis, Germar, Linn. Ent., iii., 1848, p. 211.

♂. Moderately large. Black, opaque; with scanty yellowish clothing in depressions; median ventral vitta yellowish-brown.

Head convex, with four longitudinal ridges separated by sulci. Rostrum separated from front by a transverse sulcus, moderately long, the upper surface rather deeply depressed, with moderately prominent internal ridges, the external margins curved downwards at base. Scrobes curved. Antennae with moderately long scape, incrassate; funicle with joints short, the first somewhat larger than the others. Prothorax gently rounded on sides; apical margin slightly produced above, with obtuse ocular lobes; disc with anterior constriction little marked, but with a well defined median impression, bordered on each side anteriorly by a short ridge of conjoined granules; the rest of the surface set with moderately small regular granules. Sides granulate, sometimes with granules obsolete excepting above. Elytra elongate, very gently rounded on sides; base emarginate, with moderately strongly advanced humeral angles, and slight projections at ends of third interstices. Disc with fairly regular rows of comparatively small foveiform punctures, well separated from each other, but the intervening ridges not raised. The second, fourth and sixth interstices not raised, and without tubercles, except for a pair on the second interstices at beginning of the declivity; first interstice costiform at base, not out-turned to join third; third costiform from base to about middle, followed by one or two larger tubercles, the last situated above declivity; fifth interstice with a row of separate tubercles, sometimes with the basal ones conjoined to form a short ridge leading on to humeral crest, the apical tubercle situated anteriorly to apical tubercle of third interstice; seventh with a row of moderately strong separate tubercles. Sides with rather large foveae, interstices not tuberculate nor granulate. Ventral surface with median vitta extending from metasternum to posterior margin of the second visible segment, sometimes extended to reach anterior border of apical segment; the rest of the surface flattened. Anterior tibiae with a subapical fringe of rather dense bristles on under surface.

♀. Similar, but somewhat more produced at apex; elytra with humeral angles equally advanced. *Dimensions*: ♂. 13 x 5 mm.; ♀. 15 x 7 mm.

Hab.—South Australia: Adelaide, Mt. Lofty, Karoonda, Wirra.

Allied to *M. tuberculatus* Lea, but with humeral angles advanced in both sexes.

MYTHITES POROPTEROIDES Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 22.

I am indebted to Mr. Lea for an opportunity of inspecting the unique type (♀) of this species.

The conjoined anterior ends of the first and third interstices would ally the species to *M. basalis* and *M. perfossus*, but from both it may be separated by the rounded shoulders and the subapical pair of tubercles. These tubercles are situated on each side of the suture, almost touching each other and about two-thirds of the way down the declivity. The apex of the elytra is also very strongly produced.

Hab.—Victoria: Geelong.

MYTHITES SULCICOLLIS Germ.

Acanthomus sulcicollis, Germar, Linn. Ent., iii., 1848, p. 211.

♂. Moderately large. Black, opaque; with scanty yellowish clothing in depressions; median ventral vitta yellowish-brown.

Head convex, with four longitudinal ridges separated by sulci. Rostrum separated from front by a transverse sulcus, moderately long, the upper surface rather deeply depressed, with moderately prominent internal ridges, the external margins curved downwards at base. Scrobes curved. Antennae with moderately long scape, incrassate; funicle with joints short, the first somewhat larger than the others. Prothorax gently rounded on sides; apical margin slightly produced above, with obtuse ocular lobes; disc with anterior constriction little marked, but with a well defined median impression, bordered on each side anteriorly by a short ridge of conjoined granules; the rest of the surface set with moderately small regular granules. Sides granulate, sometimes with granules obsolete excepting above. Elytra elongate, very gently rounded on sides; base emarginate, with moderately strongly advanced humeral angles, and slight projections at ends of third interstices. Disc with fairly regular rows of comparatively small foveiform punctures, well separated from each other, but the intervening ridges not raised. The second, fourth and sixth interstices not raised, and without tubercles, except for a pair on the second interstices at beginning of the declivity; first interstice costiform at base, not out-turned to join third; third costiform from base to about middle, followed by one or two larger tubercles, the last situated above declivity; fifth interstice with a row of separate tubercles, sometimes with the basal ones conjoined to form a short ridge leading on to humeral crest, the apical tubercle situated anteriorly to apical tubercle of third interstice; seventh with a row of moderately strong separate tubercles. Sides with rather large foveae, interstices not tuberculate nor granulate. Ventral surface with median vitta extending from metasternum to posterior margin of the second visible segment, sometimes extended to reach anterior border of apical segment; the rest of the surface flattened. Anterior tibiae with a subapical fringe of rather dense bristles on under surface.

♀. Similar, but somewhat more produced at apex; elytra with humeral angles equally advanced. *Dimensions*: ♂. 13 x 5 mm.; ♀. 15 x 7 mm.

Hab.—South Australia: Adelaide, Mt. Lofty, Karoonda, Wirha.

Allied to *M. tuberculatus* Lea, but with humeral angles advanced in both sexes.

MYTHITES TUBERCULATUS Lea.

Lea, Mitt. Zool. Mus. Berlin, 1910, p. 183.

The rounded shoulders in the female readily separate this sex from the corresponding one of *M. sulcicollis*, in which the shoulders are advanced. The males of the two species are less readily distinguished. In *M. tuberculatus* the prothoracic granules are larger and more irregularly arranged, while the sub-lateral impressions are well marked; the elytra are also as a rule more strongly tuberculate.

A pair in the South Australian Museum differ from the usual form in that the prothoracic sculpture is more as in *M. sulcicollis*. The male, indeed, might well be referred to that species, but the female has the humeral angles rounded. The specimens are from South Australia.

Since *M. tuberculatus* is the only species known from Tasmania, it seems to be certainly that on which Schönherr (*Mantissa Sec. Cure.*, 1847) erected the genus *Mythites*, naming the species, but not giving a specific diagnosis. As, however, a generic description is given and as *tuberculatus* was the only species assigned to the genus, it might be held that the generic description covered the species, in which case *M. tuberculatus* should be cited as of Schönherr and not of Lea.

Hab.—Tasmania; N.S. Wales; Victoria; South Australia.

MYTHITES FRATER Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 21.

A rather strongly laevigate species, in general appearance resembling *M. basalis*, but separated by the first and third interstices not being joined together at base.

From *M. sulcicollis* the prothoracic sculpture will distinguish it, while the strongly advanced humeral angles of the female will separate it from *M. tuberculatus*. It is, moreover, a much more laevigate species than the two latter.

Hab.—North and north-western N.S. Wales.

MYTHITES FOVEIPENNIS Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 23.

Specimens of this species have been taken rarely at Blackheath in the Blue Mountains. All the specimens were secured crawling on the ground and there is no evidence that this species frequents vines.

A male in my collection is somewhat smaller than usual, measuring 15 x 5 mm.

Hab.—N.S. Wales: Blue Mountains.

MYTHITES GRANULATUS Lea.

Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 92.

While closely allied to *M. foveipennis*, I agree with Mr. Lea in considering it a distinct species. Though represented in most collections, it does not appear to be common.

Hab.—Victoria: Melbourne, Monbulk.

MYTHITES TUBERCULATUS Lea.

Lea, Mitt. Zool. Mus. Berlin, 1910, p. 183.

The rounded shoulders in the female readily separate this sex from the corresponding one of *M. sulcicollis*, in which the shoulders are advanced. The males of the two species are less readily distinguished. In *M. tuberculatus* the prothoracic granules are larger and more irregularly arranged, while the sub-lateral impressions are well marked; the elytra are also as a rule more strongly tuberculate.

A pair in the South Australian Museum differ from the usual form in that the prothoracic sculpture is more as in *M. sulcicollis*. The male, indeed, might well be referred to that species, but the female has the humeral angles rounded. The specimens are from South Australia.

Since *M. tuberculatus* is the only species known from Tasmania, it seems to be certainly that on which Schönherr (*Mantissa Sec. Cure.*, 1847) erected the genus *Mythites*, naming the species, but not giving a specific diagnosis. As, however, a generic description is given and as *tuberculatus* was the only species assigned to the genus, it might be held that the generic description covered the species, in which case *M. tuberculatus* should be cited as of Schönherr and not of Lea.

Hab.—Tasmania; N.S. Wales; Victoria; South Australia.

MYTHITES FRATER Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 21.

A rather strongly laevigate species, in general appearance resembling *M. basalis*, but separated by the first and third interstices not being joined together at base.

From *M. sulcicollis* the prothoracic sculpture will distinguish it, while the strongly advanced humeral angles of the female will separate it from *M. tuberculatus*. It is, moreover, a much more laevigate species than the two latter.

Hab.—North and north-western N.S. Wales.

MYTHITES FOVEIPENNIS Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 23.

Specimens of this species have been taken rarely at Blackheath in the Blue Mountains. All the specimens were secured crawling on the ground and there is no evidence that this species frequents vines.

A male in my collection is somewhat smaller than usual, measuring 15 x 5 mm.

Hab.—N.S. Wales: Blue Mountains.

MYTHITES GRANULATUS Lea.

Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 92.

While closely allied to *M. foveipennis*, I agree with Mr. Lea in considering it a distinct species. Though represented in most collections, it does not appear to be common.

Hab.—Victoria: Melbourne, Monbulk.

MYTHITES ASPERATUS Pase.

Paseoe, Ann. Nat. Hist., (4), x., 1872, p. 84.

♂. A comparatively small species. Black; with scanty brownish clothing in depressions; median ventral vitta black.

Head convex, with four ridges separated by a deep median and an oblique impression on each side. Rostrum deeply excavate above, the depressed area widest anteriorly, narrow and sulciform at base; internal and lateral ridges equally prominent, the latter somewhat curved downwards at base. Scrobes curved. Eyes large, ovate, finely faceted. Prothorax almost straight-sided, widest behind apex; apical margin hardly produced above, with definite, though obtuse, ocular lobes. Disc with anterior constriction moderately well marked, interrupted in middle; median impression little marked; set with small regular round granules, these extending about half-way down sides. Elytra elongate, very gently rounded on sides; apex rounded; base emarginate, the humeral angles moderately strongly advanced, the ends of the first and third interstices slightly produced. Disc with rows of open foveiform punctures, showing some tendency to become confluent with those of adjacent striae; intra-strial ridges not prominent, interstices granulate, the fourth and sixth practically obsolete; the second with a small tubercle at edge of declivity; the third and fifth more prominent, set with small granules, very irregularly arranged and showing a tendency to grouping, both interstices terminating abruptly above declivity, the end of the third anterior to the tubercle on the second, and the end of the fifth anterior to that of the third; seventh and lateral interstices with small conspicuous granules. Ventral surface more or less flattened with rather narrow median vitta.

♀. Similar, but larger and more ovate, with the apex somewhat produced; sculpture similar but rougher and with more evident granules on elytra; venter convex, without hirsute vitta. *Dimensions*: ♂. 13.5 x 5 mm.; ♀. 14 x 6 mm.

Hab.—N.S. Wales: Sydney.

Described from specimens in my own collection. The type was, however, seen in the British Museum and the species is certainly correctly identified.

The elytral sculpture is much confused and difficult to describe, and this character separates it from the next species, in which the sculpture is much more regular.

M. asperatus appears to be restricted to the neighbourhood of Sydney; it is now by no means common.

MYTHITES MONTANUS, n.sp.

♂. In size, shape and general facies similar to *M. asperatus* Pase. Black; destitute of clothing.

Head, rostrum and prothorax similar; the head and rostral ridges somewhat more clearly defined, and prothorax without median impression. Elytra with more regular rows of foveiform punctures, with less tendency to transverse fusion of adjacent punctures; second, fourth and sixth interstices low, occasionally interrupted; third and fifth interstices raised, not interrupted, crenulate, setigerous but not granulate; second interstice with a large backwardly directed tubercle overhanging declivity, the third interstice ending anteriorly to second; seventh interstice broken up into a row of obscure granules, much less conspicuous than in *M. asperatus*. Sides similar to *M. asperatus*, but granules less elevated. Ventral surface and legs as in *M. asperatus*.

MYTHITES ASPERATUS Pase.

Paseoe, Ann. Nat. Hist., (4), x., 1872, p. 84.

♂. A comparatively small species. Black; with scanty brownish clothing in depressions; median ventral vitta black.

Head convex, with four ridges separated by a deep median and an oblique impression on each side. Rostrum deeply excavate above, the depressed area widest anteriorly, narrow and sulciform at base; internal and lateral ridges equally prominent, the latter somewhat curved downwards at base. Scrobes curved. Eyes large, ovate, finely faceted. Prothorax almost straight-sided, widest behind apex; apical margin hardly produced above, with definite, though obtuse, ocular lobes. Disc with anterior constriction moderately well marked, interrupted in middle; median impression little marked; set with small regular round granules, these extending about half-way down sides. Elytra elongate, very gently rounded on sides; apex rounded; base emarginate, the humeral angles moderately strongly advanced, the ends of the first and third interstices slightly produced. Disc with rows of open foveiform punctures, showing some tendency to become confluent with those of adjacent striae; intra-strial ridges not prominent, interstices granulate, the fourth and sixth practically obsolete; the second with a small tubercle at edge of declivity; the third and fifth more prominent, set with small granules, very irregularly arranged and showing a tendency to grouping, both interstices terminating abruptly above declivity, the end of the third anterior to the tubercle on the second, and the end of the fifth anterior to that of the third; seventh and lateral interstices with small conspicuous granules. Ventral surface more or less flattened with rather narrow median vitta.

♀. Similar, but larger and more ovate, with the apex somewhat produced; sculpture similar but rougher and with more evident granules on elytra; venter convex, without hirsute vitta. *Dimensions*: ♂. 13.5 x 5 mm.; ♀. 14 x 6 mm.

Hab.—N.S. Wales: Sydney.

Described from specimens in my own collection. The type was, however, seen in the British Museum and the species is certainly correctly identified.

The elytral sculpture is much confused and difficult to describe, and this character separates it from the next species, in which the sculpture is much more regular.

M. asperatus appears to be restricted to the neighbourhood of Sydney; it is now by no means common.

MYTHITES MONTANUS, n.sp.

♂. In size, shape and general facies similar to *M. asperatus* Pase. Black; destitute of clothing.

Head, rostrum and prothorax similar; the head and rostral ridges somewhat more clearly defined, and prothorax without median impression. Elytra with more regular rows of foveiform punctures, with less tendency to transverse fusion of adjacent punctures; second, fourth and sixth interstices low, occasionally interrupted; third and fifth interstices raised, not interrupted, crenulate, setigerous but not granulate; second interstice with a large backwardly directed tubercle overhanging declivity, the third interstice ending anteriorly to second; seventh interstice broken up into a row of obscure granules, much less conspicuous than in *M. asperatus*. Sides similar to *M. asperatus*, but granules less elevated. Ventral surface and legs as in *M. asperatus*.

♀. Shows similar differences from the female of *M. asperatus*. *Dimensions*: ♂. 13.5 x 4.5 mm.; ♀. 15 x 6 mm.

Hab.—New South Wales: Blue Mountains (Blackheath and Mt. Victoria).

This species may be regarded as the Blue Mountain form of *M. asperatus* Pasc.; the differences are noted above.

MYTHITES RUGOSUS, n.sp.

♂. Moderately large; allied to *M. foveipennis* Lea, but with larger granules and deeper elytral foveae. Black, subnitid; clothing absent except for minute brownish squames in the depressions; median vitta brown.

Head convex, with a series of longitudinal ridges separated by deep sulci, about four on each side of median line which is depressed. Rostrum comparatively long, thick; separated from head above by a transverse impression; deeply depressed above, with prominent basally convergent internal ridges; external margins prominent, somewhat curved downwards at base. Scrobes curved. Eyes large, somewhat flattened, finely faceted. Antennae with scape moderately long, rather strongly incrassate at apex; funicle with first joint longer than second, the remaining joints short. Prothorax rather feebly rounded on sides, widest in front of middle; anterior margin not produced above, ocular lobes present, obtuse; disc not strongly convex, with a somewhat ill-defined, transverse, sub-apical impression, and moderately well defined median line; set with rather large subnitid granules, varying in size, smallest near the centre, but always distinctly larger than in *M. foveipennis*. Sides granulate. Elytra little widened on sides; apex moderately abruptly rounded; base with well marked, moderately strongly advanced humeral angles, the ends of the first and third interstices slightly advanced. Disc with rows of large deep foveiform punctures, separated by well defined transverse ridges; third, fifth and seventh interstices more raised than the others, which are more or less interrupted by the foveae; second interstice ending in a small conical tubercle above the declivity; third interstice more or less continuous from base to beyond middle, thence broken into obtuse granules or small tubercles, ending in a distinct tubercle situated anteriorly to tubercle on second interstice; fifth interstice broken into a series of small obtuse tubercles, ending in a tubercle anterior to that of third interstice; seventh interstice forming a row of separate nodulose elevations or obtuse tubercles ending posteriorly to tubercles on fifth interstice. Sides with rows of well defined deep punctures, the interstices crossed by a series of vertical ridges extending down from the tubercles of the seventh interstice. Ventral surface with a moderately broad, conspicuous, median, hirsute vitta; the rest of the surface rather sparsely setigeropunctate. Legs simple; tarsi short.

♀. Similar, but larger, with more confused elytral sculpture; ventral surface convex with median line clothed with yellowish subpubescence; apical segment with a subquadrate depression at apex. *Dimensions*: ♂. 17 x 6.5 mm.; ♀. 19 x 7.5 mm.

Hab.—N.S. Wales: Boro (W. W. Froggatt), Weddin Mts. (T. G. Sloane), Portland (E. W. Ferguson).

The holotype ♂ was taken at Boro in March, 1894, while the autotype female was found by Mr. Sloane some years ago on the top of the Weddin Mountains, near Grenfell. The Portland specimen is a male and is smaller (16 x 5.5 mm.) though otherwise agreeing with the Boro male.

The elytral sculpture is much confused; the strong development of the ridges

♀. Shows similar differences from the female of *M. asperatus*. *Dimensions*: ♂. 13.5 x 4.5 mm.; ♀. 15 x 6 mm.

Hab.—New South Wales: Blue Mountains (Blackheath and Mt. Victoria).

This species may be regarded as the Blue Mountain form of *M. asperatus* Pasc.; the differences are noted above.

MYTHITES RUGOSUS, n.sp.

♂. Moderately large; allied to *M. foveipennis* Lea, but with larger granules and deeper elytral foveae. Black, subnitid; clothing absent except for minute brownish squames in the depressions; median vitta brown.

Head convex, with a series of longitudinal ridges separated by deep sulci, about four on each side of median line which is depressed. Rostrum comparatively long, thick; separated from head above by a transverse impression; deeply depressed above, with prominent basally convergent internal ridges; external margins prominent, somewhat curved downwards at base. Scrobes curved. Eyes large, somewhat flattened, finely faceted. Antennae with scape moderately long, rather strongly incrassate at apex; funicle with first joint longer than second, the remaining joints short. Prothorax rather feebly rounded on sides, widest in front of middle; anterior margin not produced above, ocular lobes present, obtuse; disc not strongly convex, with a somewhat ill-defined, transverse, sub-apical impression, and moderately well defined median line; set with rather large subnitid granules, varying in size, smallest near the centre, but always distinctly larger than in *M. foveipennis*. Sides granulate. Elytra little widened on sides; apex moderately abruptly rounded; base with well marked, moderately strongly advanced humeral angles, the ends of the first and third interstices slightly advanced. Disc with rows of large deep foveiform punctures, separated by well defined transverse ridges; third, fifth and seventh interstices more raised than the others, which are more or less interrupted by the foveae; second interstice ending in a small conical tubercle above the declivity; third interstice more or less continuous from base to beyond middle, thence broken into obtuse granules or small tubercles, ending in a distinct tubercle situated anteriorly to tubercle on second interstice; fifth interstice broken into a series of small obtuse tubercles, ending in a tubercle anterior to that of third interstice; seventh interstice forming a row of separate nodulose elevations or obtuse tubercles ending posteriorly to tubercles on fifth interstice. Sides with rows of well defined deep punctures, the interstices crossed by a series of vertical ridges extending down from the tubercles of the seventh interstice. Ventral surface with a moderately broad, conspicuous, median, hirsute vitta; the rest of the surface rather sparsely setigeropunctate. Legs simple; tarsi short.

♀. Similar, but larger, with more confused elytral sculpture; ventral surface convex with median line clothed with yellowish subpubescence; apical segment with a subquadrate depression at apex. *Dimensions*: ♂. 17 x 6.5 mm.; ♀. 19 x 7.5 mm.

Hab.—N.S. Wales: Boro (W. W. Froggatt), Weddin Mts. (T. G. Sloane), Portland (E. W. Ferguson).

The holotype ♂ was taken at Boro in March, 1894, while the autotype female was found by Mr. Sloane some years ago on the top of the Weddin Mountains, near Grenfell. The Portland specimen is a male and is smaller (16 x 5.5 mm.) though otherwise agreeing with the Boro male.

The elytral sculpture is much confused; the strong development of the ridges

separating the deep foveae above and below, with the interruption of the interstices opposite the foveae, has led to the development of a series of transverse rugae, most marked in the outer portion of the elytra and on the sides.

MYTHITES ARBORICOLA, n.sp.

♀. Moderately large, elongate. Black; rather densely clothed with minute grey and metallic coppery subpubescence, the grey forming three vittae on prothorax, and scattered macules on elytra.

Head convex, forehead depressed, somewhat rugulose, with median line carinate, and with lateral margins raised, ridge-like, above the eyes. Rostrum separated from head by a deep transverse sulcus; rather short and wide, the upper surface deeply depressed; internal ridges short, convergent to base; external margins equally raised, subangulate in front, curved downwards at base. Scrobes curved. Antennae with scape moderately long; funicle with joints short, the first two longer than the others; club somewhat elongate. Prothorax little rounded on sides; apical margin truncate above, with obtuse ocular lobes; disc with a distinctly impressed median line, the anterior transverse impression represented by a somewhat irregular depressed area on each side, with another irregular, though deep, depression corresponding in position to the oblique sulcus of other species; surface set with moderate-sized round granules, slightly depressed, not confluent and extending on to and covering sides. Elytra elongate, gently rounded on sides; apex somewhat produced and separately mucronate; base emarginate, with advanced, somewhat noduliform humeral angles, the ends of the first and second interstices projecting forwards to a less extent. Disc with irregular, ill-defined, open, foveiform punctures; the first, third, fifth and seventh interstices with small distinct granules in double series, sometimes present also on the intervening areas; second interstice with a prominent tubercle at summit of declivity, diverging from its fellow on the opposite elytron; the third and fifth interstices each with a similar tubercle, that on fifth strongly outwardly projecting, the three tubercles set in an oblique line across each elytron; seventh interstice with a moderately well defined infra-humeral tubercle; lateral interstices with granules obsolete. Ventral surface convex; no median vitta, the surface with numerous small golden-brown maculae. *Dimensions*: ♀. 17 x 6 mm.

Hab.—Queensland: Mt. Tambourine (H. J. Carter); N.S. Wales: Glen Innes (H. W. Brown).

The Mt. Tambourine specimens, two in number, were shaken by Mr. Carter from vines. Mr. Brown informs me that he obtained his specimen on the ground.

Apart from the following species, *M. arboricola* is most nearly allied to *M. foveipennis* and *M. granulatus*, but the sculpture is rougher than in these two species, while the individual granules are smaller than in *M. rugosus*. The prothoracic sculpture also differs from that in those species.

MYTHITES COXI, n.sp.

♀. Closely allied to *M. arboricola*, but somewhat differently sculptured. Black; with sparse dark brown clothing.

Head convex with deeply impressed median line and shorter sublateral impressions separating four rounded somewhat ill-defined ridges. Rostrum much as in *M. arboricola*, the internal ridges rather more prominent. Prothorax rather broader, little rounded on the sides, with rather feebly impressed median line and

separating the deep foveae above and below, with the interruption of the interstices opposite the foveae, has led to the development of a series of transverse rugae, most marked in the outer portion of the elytra and on the sides.

MYTHITES ARBORICOLA, n.sp.

♀. Moderately large, elongate. Black; rather densely clothed with minute grey and metallic coppery subpubescence, the grey forming three vittae on prothorax, and scattered macules on elytra.

Head convex, forehead depressed, somewhat rugulose, with median line carinate, and with lateral margins raised, ridge-like, above the eyes. Rostrum separated from head by a deep transverse sulcus; rather short and wide, the upper surface deeply depressed; internal ridges short, convergent to base; external margins equally raised, subangulate in front, curved downwards at base. Scrobes curved. Antennae with scape moderately long; funicle with joints short, the first two longer than the others; club somewhat elongate. Prothorax little rounded on sides; apical margin truncate above, with obtuse ocular lobes; disc with a distinctly impressed median line, the anterior transverse impression represented by a somewhat irregular depressed area on each side, with another irregular, though deep, depression corresponding in position to the oblique sulcus of other species; surface set with moderate-sized round granules, slightly depressed, not confluent and extending on to and covering sides. Elytra elongate, gently rounded on sides; apex somewhat produced and separately mucronate; base emarginate, with advanced, somewhat noduliform humeral angles, the ends of the first and second interstices projecting forwards to a less extent. Disc with irregular, ill-defined, open, foveiform punctures; the first, third, fifth and seventh interstices with small distinct granules in double series, sometimes present also on the intervening areas; second interstice with a prominent tubercle at summit of declivity, diverging from its fellow on the opposite elytron; the third and fifth interstices each with a similar tubercle, that on fifth strongly outwardly projecting, the three tubercles set in an oblique line across each elytron; seventh interstice with a moderately well defined infra-humeral tubercle; lateral interstices with granules obsolete. Ventral surface convex; no median vitta, the surface with numerous small golden-brown maculae. *Dimensions*: ♀. 17 x 6 mm.

Hab.—Queensland: Mt. Tambourine (H. J. Carter); N.S. Wales: Glen Innes (H. W. Brown).

The Mt. Tambourine specimens, two in number, were shaken by Mr. Carter from vines. Mr. Brown informs me that he obtained his specimen on the ground.

Apart from the following species, *M. arboricola* is most nearly allied to *M. foveipennis* and *M. granulatus*, but the sculpture is rougher than in these two species, while the individual granules are smaller than in *M. rugosus*. The prothoracic sculpture also differs from that in those species.

MYTHITES COXI, n.sp.

♀. Closely allied to *M. arboricola*, but somewhat differently sculptured. Black; with sparse dark brown clothing.

Head convex with deeply impressed median line and shorter sublateral impressions separating four rounded somewhat ill-defined ridges. Rostrum much as in *M. arboricola*, the internal ridges rather more prominent. Prothorax rather broader, little rounded on the sides, with rather feebly impressed median line and

indistinct impressions on the disc; surface set with round granules, somewhat depressed and varying in size. Elytra rather broader than in *M. arboricola*, the outline of the sides less crenulate; base more evenly emarginate, the humeral angles advanced, but the ends of the third interstices hardly produced; disc with sculpture more regular, the depressions less marked, and the interstices less crenulate; the tubercles at apex of second, third and fifth interstices decidedly smaller, particularly that on fifth interstice, while the tubercle on the second is more approximated to the one on the opposite elytron; seventh interstice not arising from a definite infra-humeral tubercle, and composed of low irregular granules rather than tubercles. Ventral surface almost destitute of clothing. *Dimensions*: ♀. 17 x 6.5 mm.

Hab.—N.S. Wales: Eccleston (Allyn R.), Bulahdelah.

After some hesitation I have decided to describe this species as distinct, rather than as a variety of *M. arboricola*. The differences are obvious to the eye, but more difficult to define; on the whole it may be said that *M. arboricola* is the more irregularly sculptured insect of the two. Also the differences in the forehead, if constant, as in the specimens available, afford a ready means of differentiating the two species; in *M. arboricola* the median line is carinate, in *M. coxi* it is sulcate.

The type was taken near Eccleston on the Allyn River (a branch of the Paterson) clinging to a vine in the scrub. A second female was taken in the same locality by Mr. J. Hopson. The third specimen is somewhat larger (19 x 7.5 mm.) and was captured by the late H. W. Cox some years ago at Bulahdelah, also in a vine. I have affixed Mr. Cox's name to the species in commemoration of his services to entomology.

BUBARIS.

Pascoe, Ann. Mag. Nat. Hist., (5), ix., 1882, p. 378.

Small, ovate. Head convex, separated from rostrum by a transverse sulcus. Rostrum short and broad, the upper surface sulcate, with conspicuous internal ridges, the lateral margins out-turned at base; clypeal plate exserted; submental margin convex or dentate in middle. Scrobes strongly curved downwards, almost reaching eyes. Antennal scape moderately short, strongly incrassate and dilated at apex; funicular joints short. Prothorax rounded on sides; apical margin slightly produced above, with well-marked ocular lobes; dorsum granulate. Elytra gradually widened posteriorly to level of declivity, thence suddenly contracted to apex; declivity abrupt; humeral angles produced; dorsum more or less regularly punctured, interstices granulate. Prosternum not excavate. Legs comparatively short; tarsi short.

Genotype, *B. indemnis* Pase.

In describing the genus, Pascoe referred to it as having somewhat negative characters. On the whole, however, the species comprised in *Bubaris* form a fairly homogeneous group, whose affinities would appear to be both with *Mythites* and *Aedriodes*. From the former, *Bubaris* differs in its general form and in the rather shorter rostrum expanded and not narrowed at base, with definitely exserted clypeal plate. The rostral structure also separates it from *Aedriodes*. In the majority of the species the expanded scape is characteristic. *Brachymycterus* is closely allied in many respects, but is without ocular lobes.

The genus was founded in 1882 by Pascoe for *B. indemnis*; at the same time *Mythites pithecius* Pascoe (1872) was referred to the genus.

indistinct impressions on the disc; surface set with round granules, somewhat depressed and varying in size. Elytra rather broader than in *M. arboricola*, the outline of the sides less crenulate; base more evenly emarginate, the humeral angles advanced, but the ends of the third interstices hardly produced; disc with sculpture more regular, the depressions less marked, and the interstices less crenulate; the tubercles at apex of second, third and fifth interstices decidedly smaller, particularly that on fifth interstice, while the tubercle on the second is more approximated to the one on the opposite elytron; seventh interstice not arising from a definite infra-humeral tubercle, and composed of low irregular granules rather than tubercles. Ventral surface almost destitute of clothing. *Dimensions*: ♀. 17 x 6.5 mm.

Hab.—N.S. Wales: Eccleston (Allyn R.), Bulahdelah.

After some hesitation I have decided to describe this species as distinct, rather than as a variety of *M. arboricola*. The differences are obvious to the eye, but more difficult to define; on the whole it may be said that *M. arboricola* is the more irregularly sculptured insect of the two. Also the differences in the forehead, if constant, as in the specimens available, afford a ready means of differentiating the two species; in *M. arboricola* the median line is carinate, in *M. coxi* it is sulcate.

The type was taken near Eccleston on the Allyn River (a branch of the Paterson) clinging to a vine in the scrub. A second female was taken in the same locality by Mr. J. Hopson. The third specimen is somewhat larger (19 x 7.5 mm.) and was captured by the late H. W. Cox some years ago at Bulahdelah, also in a vine. I have affixed Mr. Cox's name to the species in commemoration of his services to entomology.

BUBARIS.

Pascoe, Ann. Mag. Nat. Hist., (5), ix., 1882, p. 378.

Small, ovate. Head convex, separated from rostrum by a transverse sulcus. Rostrum short and broad, the upper surface sulcate, with conspicuous internal ridges, the lateral margins out-turned at base; clypeal plate exserted; submental margin convex or dentate in middle. Scrobes strongly curved downwards, almost reaching eyes. Antennal scape moderately short, strongly incrassate and dilated at apex; funicular joints short. Prothorax rounded on sides; apical margin slightly produced above, with well-marked ocular lobes; dorsum granulate. Elytra gradually widened posteriorly to level of declivity, thence suddenly contracted to apex; declivity abrupt; humeral angles produced; dorsum more or less regularly punctured, interstices granulate. Prosternum not excavate. Legs comparatively short; tarsi short.

Genotype, *B. indemnis* Pasce.

In describing the genus, Pascoe referred to it as having somewhat negative characters. On the whole, however, the species comprised in *Bubaris* form a fairly homogeneous group, whose affinities would appear to be both with *Mythites* and *Aedriodes*. From the former, *Bubaris* differs in its general form and in the rather shorter rostrum expanded and not narrowed at base, with definitely exserted clypeal plate. The rostral structure also separates it from *Aedriodes*. In the majority of the species the expanded scape is characteristic. *Brachymycterus* is closely allied in many respects, but is without ocular lobes.

The genus was founded in 1882 by Pascoe for *B. indemnis*; at the same time *Mythites pithecius* Pascoe (1872) was referred to the genus.

In 1910 Lea added the names of 3 species—*hardcastlei* (Trans. Roy. Soc. S. Aust., xxxiv., p. 20), *apicalis* and *pubescens* (Mem. Soc. ent. Belgique, xviii., pp. 90-91). One of these however—*apicalis*—is synonymous with *B. indemnis* Pase.

In the present paper one new species is added and one—*rudis* Blackb.—transferred from *Atychoria*. This species presents several differences, however, from the other species and may eventually require a new genus. The genus *Bubaris* is practically confined to the inland districts of New South Wales and Queensland; *B. pithecius* is widely distributed in New South Wales and *B. indemnis* in the northern portion of the central division of Queensland extending to the coastal districts at Mackay, Bowen (Port Denison) and Townsville; Lea also records it from as far south as Brisbane. *B. carteri* appears confined to the tablelands of northern New South Wales and southern Queensland. *B. hardcastlei* occurs in the south-western districts of Queensland; while *B. pubescens* has a wide range in western New South Wales extending to Cooper's Creek. *B. rudis* Blackb. is from Central Australia.

Table of Species.

- | | | | |
|----|------|---|-----------------------------|
| 1 | (8) | Elytra with a row of tubercles across declivity. | |
| 2 | (3) | Elytral sculpture nodulo-tuberculate. | <i>B. pithecius</i> Pase. |
| 3 | (2) | Elytral sculpture granulate (the subapical tubercles excepted). | |
| 4 | (7) | Clothing short. | |
| 5 | (6) | Elytral punctures normal; interstices with small granules. | <i>B. indemnis</i> Pase. |
| 6 | (5) | Elytral punctures narrow, elongate; interstices with minute granules. | <i>B. carteri</i> , n.sp. |
| 7 | (4) | Clothing long, pubescent. | <i>B. pubescens</i> Lea. |
| 8 | (1) | Elytra without tubercles across declivity. | |
| 9 | (10) | Scape strongly dilatate. | <i>B. hardcastlei</i> Lea. |
| 10 | (9) | Scape incrassate but not dilatate. | <i>B. (?) rudis</i> Blackb. |

BUBARIS PITHECIUS Pascoe.

Mythites pithecius, Pascoe, Ann. Nat. Hist., 1872, p. 84.—*Bubaris pithecius*, Pascoe, *op. cit.*, 1882, p. 378 (reference); *id.*, Lea, Mém. Soc. ent. Belgique, xviii., 1910, p. 89.

♂. Black; practically destitute of clothing; nigro-setose.

Head convex, rather rugosely granulate. Rostrum separated from head above by a transverse sulcus; upper surface with median line deeply impressed; internal ridges prominent; external margins curved outwards and somewhat downwards at base. Scrobes curved, extending back to eyes. Scape of antennae moderately short, strongly incrassate; first joint of funicle longer than wide, the others briefly transverse. Prothorax feebly rounded on the sides, the apical margin produced above, with feeble post-ocular lobes; dorsum deeply impressed in median line, and with somewhat irregular sublateral impressions, the surface set with round granules showing a more or less well marked tendency to fuse into longitudinal ridges on each side of the median impression, the granules larger near the sides; lateral surfaces granulate above, punctate beneath. Elytra elongate, gradually widened to level of declivity, thence suddenly rounded; base with humeral angles advanced, also to a less extent the ends of the third interstices; dorsum with four tubercles across the declivity, situated on the second and fourth interstices, the inner pair the larger; punctures shallow, open, not very distinct; third and fifth interstices raised, set with somewhat obsolete, more or less fused

In 1910 Lea added the names of 3 species—*hardcastlei* (Trans. Roy. Soc. S. Aust., xxxiv., p. 20), *apicalis* and *pubescens* (Mem. Soc. ent. Belgique, xviii., pp. 90-91). One of these however—*apicalis*—is synonymous with *B. indemnis* Pase.

In the present paper one new species is added and one—*rudis* Blackb.—transferred from *Atychoria*. This species presents several differences, however, from the other species and may eventually require a new genus. The genus *Bubaris* is practically confined to the inland districts of New South Wales and Queensland; *B. pithecius* is widely distributed in New South Wales and *B. indemnis* in the northern portion of the central division of Queensland extending to the coastal districts at Mackay, Bowen (Port Denison) and Townsville; Lea also records it from as far south as Brisbane. *B. carteri* appears confined to the tablelands of northern New South Wales and southern Queensland. *B. hardcastlei* occurs in the south-western districts of Queensland; while *B. pubescens* has a wide range in western New South Wales extending to Cooper's Creek. *B. rudis* Blackb. is from Central Australia.

Table of Species.

- | | | | |
|----|------|---|-----------------------------|
| 1 | (8) | Elytra with a row of tubercles across declivity. | |
| 2 | (3) | Elytral sculpture nodulo-tuberculate. | <i>B. pithecius</i> Pase. |
| 3 | (2) | Elytral sculpture granulate (the subapical tubercles excepted). | |
| 4 | (7) | Clothing short. | |
| 5 | (6) | Elytral punctures normal; interstices with small granules. | <i>B. indemnis</i> Pase. |
| 6 | (5) | Elytral punctures narrow, elongate; interstices with minute granules. | <i>B. carteri</i> , n.sp. |
| 7 | (4) | Clothing long, pubescent. | <i>B. pubescens</i> Lea. |
| 8 | (1) | Elytra without tubercles across declivity. | |
| 9 | (10) | Scape strongly dilatate. | <i>B. hardcastlei</i> Lea. |
| 10 | (9) | Scape incrassate but not dilatate. | <i>B. (?) rudis</i> Blackb. |

BUBARIS PITHECIUS Pascoe.

Mythites pithecius, Pascoe, Ann. Nat. Hist., 1872, p. 84.—*Bubaris pithecius*, Pascoe, *op. cit.*, 1882, p. 378 (reference); *id.*, Lea, Mém. Soc. ent. Belgique, xviii., 1910, p. 89.

♂. Black; practically destitute of clothing; nigro-setose.

Head convex, rather rugosely granulate. Rostrum separated from head above by a transverse sulcus; upper surface with median line deeply impressed; internal ridges prominent; external margins curved outwards and somewhat downwards at base. Scrobes curved, extending back to eyes. Scape of antennae moderately short, strongly incrassate; first joint of funicle longer than wide, the others briefly transverse. Prothorax feebly rounded on the sides, the apical margin produced above, with feeble post-ocular lobes; dorsum deeply impressed in median line, and with somewhat irregular sublateral impressions, the surface set with round granules showing a more or less well marked tendency to fuse into longitudinal ridges on each side of the median impression, the granules larger near the sides; lateral surfaces granulate above, punctate beneath. Elytra elongate, gradually widened to level of declivity, thence suddenly rounded; base with humeral angles advanced, also to a less extent the ends of the third interstices; dorsum with four tubercles across the declivity, situated on the second and fourth interstices, the inner pair the larger; punctures shallow, open, not very distinct; third and fifth interstices raised, set with somewhat obsolete, more or less fused

granules, in irregular series; lateral interstices with more distinct granules. Ventral surface flattened; with small, inconspicuous setigerous punctures. Anterior tibiae hirsute along inner border.

♀. Similar but broader, the ventral surface feebly convex. *Dimensions*: ♂. 11 x 4.5; ♀. 11 x 5.5 mm.

Hab.—N.S. Wales: Monaro, Goulburn, Grenfell; Victoria.

A rather common and widely distributed species showing some variation in the development and distinctness of the granules. In two specimens (♂ and ♀) from an unknown locality, the elytral granules on the third and fifth interstices are fused to form distinct, somewhat wavy costae.

BUBARIS INDEMNIS Pascoe.

Pascoe, Ann. Mag. Nat. Hist. (5), ix., 1882, p. 378.—*B. apicalis* Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 90.

I have examined the type of *B. indemnus* Pascoe, in the British Museum, and it is certainly conspecific with *B. apicalis* Lea.

The species is to some extent variable in the degree of granularity of the elytra, but the differences hardly appear to be of specific value. *B. indemnus* has a wide distribution in Queensland.

Hab.—Brisbane, Wide Bay, Rockhampton, Mackenzie River, Peak Downs, Mackay, Port Denison (Bowen), Townsville.

BUBARIS CARTERI, n.sp.

♂. Small. Black; moderately densely clothed with minute black subpubescence.

Head convex; forehead with obscure flattened granules. Rostrum short, thick, not separated from head above; upper surface with median line deeply impressed; internal ridges moderately prominent, rather feebly convergent towards base; lateral ridges not angulate anteriorly, curved outwards at base. Scrobes curved. Antennae with scape greatly dilated at extremity; funicle with joints short, the first and second more elongate than the remainder which are transverse; club with base truncate, closely applied to funicle. Prothorax somewhat feebly rounded on sides, widest in front of middle; apical margin rather strongly advanced over head, with feeble ocular lobes; disc with well marked, deeply impressed median line, and with a second impression midway between median line and lateral margin, deep anteriorly, fading away on posterior half, the derm between these impressions set with small obscure granules, showing a tendency to become strigiform. Sides granulate. Elytra elongate, gradually widened to level of declivity, thence rather suddenly rounded; base emarginate, with humeral angles produced, the ends of the third interstices also advanced; disc very strongly declivous posteriorly, with a row of 4 small obtuse tubercles across edge, these being situated on the third and fifth interstices; the two inner striae with narrow elongate cleft-like punctures often confluent, the more lateral striae with fewer similar punctures; interstices feebly raised, with minute setigerous granules, difficult to trace. Sides with more rounded punctures, the interstices not granulate. Ventral surface flattened, with deep sutures between the intermediate segments; metasternum and ventral segments with moderately large deep punctures, irregularly arranged on basal segments, set in a row along the posterior border of the intermediate segments. Legs short; posterior tarsi short.

granules, in irregular series; lateral interstices with more distinct granules. Ventral surface flattened; with small, inconspicuous setigerous punctures. Anterior tibiae hirsute along inner border.

♀. Similar but broader, the ventral surface feebly convex. *Dimensions*: ♂. 11 x 4.5; ♀. 11 x 5.5 mm.

Hab.—N.S. Wales: Monaro, Goulburn, Grenfell; Victoria.

A rather common and widely distributed species showing some variation in the development and distinctness of the granules. In two specimens (♂ and ♀) from an unknown locality, the elytral granules on the third and fifth interstices are fused to form distinct, somewhat wavy costae.

BUBARIS INDEMNIS Pascoe.

Pascoe, Ann. Mag. Nat. Hist. (5), ix., 1882, p. 378.—*B. apicalis* Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 90.

I have examined the type of *B. indemnus* Pascoe, in the British Museum, and it is certainly conspecific with *B. apicalis* Lea.

The species is to some extent variable in the degree of granularity of the elytra, but the differences hardly appear to be of specific value. *B. indemnus* has a wide distribution in Queensland.

Hab.—Brisbane, Wide Bay, Rockhampton, Mackenzie River, Peak Downs, Mackay, Port Denison (Bowen), Townsville.

BUBARIS CARTERI, n.sp.

♂. Small. Black; moderately densely clothed with minute black subpubescence.

Head convex; forehead with obscure flattened granules. Rostrum short, thick, not separated from head above; upper surface with median line deeply impressed; internal ridges moderately prominent, rather feebly convergent towards base; lateral ridges not angulate anteriorly, curved outwards at base. Scrobes curved. Antennae with scape greatly dilated at extremity; funicle with joints short, the first and second more elongate than the remainder which are transverse; club with base truncate, closely applied to funicle. Prothorax somewhat feebly rounded on sides, widest in front of middle; apical margin rather strongly advanced over head, with feeble ocular lobes; disc with well marked, deeply impressed median line, and with a second impression midway between median line and lateral margin, deep anteriorly, fading away on posterior half, the derm between these impressions set with small obscure granules, showing a tendency to become strigiform. Sides granulate. Elytra elongate, gradually widened to level of declivity, thence rather suddenly rounded; base emarginate, with humeral angles produced, the ends of the third interstices also advanced; disc very strongly declivous posteriorly, with a row of 4 small obtuse tubercles across edge, these being situated on the third and fifth interstices; the two inner striae with narrow elongate cleft-like punctures often confluent, the more lateral striae with fewer similar punctures; interstices feebly raised, with minute setigerous granules, difficult to trace. Sides with more rounded punctures, the interstices not granulate. Ventral surface flattened, with deep sutures between the intermediate segments; metasternum and ventral segments with moderately large deep punctures, irregularly arranged on basal segments, set in a row along the posterior border of the intermediate segments. Legs short; posterior tarsi short.

♀. Similar; prothoracic granules more distinct; ventral surface very feebly convex at base, with sutures slightly less depressed. *Dimensions*: ♂. 8.5 x 4 mm.; ♀. 9 x 4.5 mm.

Hab.—Queensland: Dalveen (H. J. Carter, Dec., 1910); N.S. Wales: Upper Clarence River (H. J. Carter, Sept., 1904), Glen Innes (H. W. Brown).

A small rather dingy species, with curious narrow elongate elytral punctures.

BUBARIS PUBESCENS Lea.

Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 91.

This species is readily distinguished from its congeners by the nature of the clothing. It is widely dispersed in western N.S. Wales, extending into Central Australia.

Hab.—N.S. Wales: Bourke, Wilcannia, Coolabah, Nevertire, Narromine, Moree; Central Australia: Cooper's Creek.

BUBARIS HARDCASTLEI Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 20.

This distinct species differs from all others, with the exception of the following, which is somewhat doubtfully referred to the genus, in lacking the larger tubercles across the summit of the declivity of the elytra. I am indebted to Mr. Lea for a paratype of the species.

Hab.—Queensland.

BUBARIS RUDIS Blackb.

Atychoria rudis Blackburn, Report Horn Exped. Cent. Aust., ii., 1896, p. 294.

Elongate, subcylindrical. Black; almost destitute of clothing, a few yellow or grey patches of subpubescence about declivity and sides.

Head strongly convex, separated from rostrum by a transverse impression, irregularly granulate behind transverse impression. Rostrum short and broad; dorsal surface with a deep median sulcus, bordered on each side by a raised ridge, with a longitudinal impression between ridge and external margin, the latter outwardly and backwardly directed in basal portion. Scrobe curved, not reaching eye. Scape short and thick. Eyes flattened, almost concealed by ocular lobes. Prothorax evenly rounded on sides, very strongly transversely convex; apical margin with strong ocular lobes; disc with well-marked subapical transverse impression, median line not impressed, set with rather large, umbilicate non-contiguous granules; sides similarly granulate. Elytra elongate, very little widened posteriorly; base emarginate, the ends of the third and fifth interstices projecting forwards; disc strongly convex from side to side, with moderately deep, open punctures; interstices all equally prominent, set with moderately large umbilicate setigerous granules, frequently duplicated, giving a very confused appearance to elytra. Sides with similar but less evidently umbilicate granules. Ventral surface with a median black hirsute vitta on basal half; intermediate segments subnitid with a few setigerous punctures; apical segment with a few coarser punctures at apex. Tarsi short and broad. *Dimensions*: ♂. ♀. Long, 4-5½ l.; Lat. 1 3/5-2 3/5 l. (Blackburn).

Hab.—Central Australia: Storm Creek, Tempe Downs, Tarcoola.

♀. Similar; prothoracic granules more distinct; ventral surface very feebly convex at base, with sutures slightly less depressed. *Dimensions*: ♂. 8.5 x 4 mm.; ♀. 9 x 4.5 mm.

Hab.—Queensland: Dalveen (H. J. Carter, Dec., 1910); N.S. Wales: Upper Clarence River (H. J. Carter, Sept., 1904), Glen Innes (H. W. Brown).

A small rather dingy species, with curious narrow elongate elytral punctures.

BUBARIS PUBESCENS Lea.

Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 91.

This species is readily distinguished from its congeners by the nature of the clothing. It is widely dispersed in western N.S. Wales, extending into Central Australia.

Hab.—N.S. Wales: Bourke, Wilcannia, Coolabah, Nevertire, Narromine, Moree; Central Australia: Cooper's Creek.

BUBARIS HARDCASTLEI Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 20.

This distinct species differs from all others, with the exception of the following, which is somewhat doubtfully referred to the genus, in lacking the larger tubercles across the summit of the declivity of the elytra. I am indebted to Mr. Lea for a paratype of the species.

Hab.—Queensland.

BUBARIS RUDIS Blackb.

Atychoria rudis Blackburn, Report Horn Exped. Cent. Aust., ii., 1896, p. 294.

Elongate, subcylindrical. Black; almost destitute of clothing, a few yellow or grey patches of subpubescence about declivity and sides.

Head strongly convex, separated from rostrum by a transverse impression, irregularly granulate behind transverse impression. Rostrum short and broad; dorsal surface with a deep median sulcus, bordered on each side by a raised ridge, with a longitudinal impression between ridge and external margin, the latter outwardly and backwardly directed in basal portion. Scrobe curved, not reaching eye. Scape short and thick. Eyes flattened, almost concealed by ocular lobes. Prothorax evenly rounded on sides, very strongly transversely convex; apical margin with strong ocular lobes; disc with well-marked subapical transverse impression, median line not impressed, set with rather large, umbilicate non-contiguous granules; sides similarly granulate. Elytra elongate, very little widened posteriorly; base emarginate, the ends of the third and fifth interstices projecting forwards; disc strongly convex from side to side, with moderately deep, open punctures; interstices all equally prominent, set with moderately large umbilicate setigerous granules, frequently duplicated, giving a very confused appearance to elytra. Sides with similar but less evidently umbilicate granules. Ventral surface with a median black hirsute vitta on basal half; intermediate segments subnitid with a few setigerous punctures; apical segment with a few coarser punctures at apex. Tarsi short and broad. *Dimensions*: ♂. ♀. Long, 4-5½ l.; Lat. 1 3/5-2 3/5 l. (Blackburn).

Hab.—Central Australia: Storm Creek, Tempe Downs, Tarcoola.

I have examined the type of the species, now in the British Museum, as well as a paratype and another specimen in the South Australian Museum. The species cannot be allowed to remain in *Atychoria*, but I am doubtful of its exact position. Possibly a new genus should have been erected to receive it, but I have thought it better to place it, at least tentatively, in *Bubaris*. The chief objections to its inclusion in *Bubaris* are its more elongate subcylindrical form and the non-dilatate scape.

BRACHYMYCTERUS.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 87.

The following particulars should be added to the generic diagnosis: Rostrum rather wider at base than apex; clypeal plate slightly exserted; submentum lobate; eyes coarsely faceted.

The genus is undoubtedly allied to *Bubaris*, but distinct, being readily separated by the absence of prothoracic ocular lobes as well as by the lobate submentum and differences in the rostrum.

BRACHYMYCTERUS AURITUS Ferg.

Ferguson, *loc. cit.*, p. 88.

Hab.—Western Australia: Cue.

AEDRIODES.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 85.

Small; elongate or comparatively broad. Head convex, slightly flattened in front. Rostrum short and broad, flattened above, in the same plane as the front of head, median line sulcate, internal ridges broad and flattened, hardly differentiated externally from the rest of the surface; clypeal plate situated on upper surface, hardly projecting, but separated by a deep V-shaped sulcus. Scrobes short, straight or slightly curved. Antennae short. Submentum feebly bisinuate. Prothorax convex, rounded on sides, apex feebly produced above, ocular lobes present, feeble and obtuse; dorsum with deep median sulcus and sublateral sulci in anterior portion; surface granulate. Elytra either relatively broad or more elongate; humeral angles produced; disc with fairly regular punctures; interstices granulate, tuberculate or subcostate. Prosternum not excavate. Legs moderately long, tarsi short, the posterior slightly longer.

Genotype, *Ae. fastigatus* Pasc.

The rostral structure affords the most distinctive character of this genus; the subplanate dorsum with narrow impressed median line and flattened internal ridges, and the position of the clypeal plate are very characteristic. The prothoracic sculpture shows an approach to *Bubaris*, and to a less extent to some of the other genera. The elytra show the usual two rows of tubercles; the humeral angles are well marked and advanced, sometimes markedly so.

The genus was established in 1872 by Pascoe for the reception of 3 species—*fastigatus*, *mendosus* and *inuus*, and the first of these is here designated as genotype. At the same time Pascoe referred *Euomus nodipennis* Bohem. (1843), originally described as an *Amycterus*, to *Aedriodes*. This species was among those referred by Schönherr to *Euomus* when that genus was described in 1847.

In 1903, Lea added a fifth species—*humeralis*—to the genus. In the present paper 4 additional species are proposed as new.

I have examined the type of the species, now in the British Museum, as well as a paratype and another specimen in the South Australian Museum. The species cannot be allowed to remain in *Atychoria*, but I am doubtful of its exact position. Possibly a new genus should have been erected to receive it, but I have thought it better to place it, at least tentatively, in *Bubaris*. The chief objections to its inclusion in *Bubaris* are its more elongate subcylindrical form and the non-dilatate scape.

BRACHYMYCTERUS.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 87.

The following particulars should be added to the generic diagnosis: Rostrum rather wider at base than apex; clypeal plate slightly exserted; submentum lobate; eyes coarsely faceted.

The genus is undoubtedly allied to *Bubaris*, but distinct, being readily separated by the absence of prothoracic ocular lobes as well as by the lobate submentum and differences in the rostrum.

BRACHYMYCTERUS AURITUS Ferg.

Ferguson, *loc. cit.*, p. 88.

Hab.—Western Australia: Cue.

AEDRIODES.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 85.

Small; elongate or comparatively broad. Head convex, slightly flattened in front. Rostrum short and broad, flattened above, in the same plane as the front of head, median line sulcate, internal ridges broad and flattened, hardly differentiated externally from the rest of the surface; clypeal plate situated on upper surface, hardly projecting, but separated by a deep V-shaped sulcus. Scrobes short, straight or slightly curved. Antennae short. Submentum feebly bisinuate. Prothorax convex, rounded on sides, apex feebly produced above, ocular lobes present, feeble and obtuse; dorsum with deep median sulcus and sublateral sulci in anterior portion; surface granulate. Elytra either relatively broad or more elongate; humeral angles produced; disc with fairly regular punctures; interstices granulate, tuberculate or subcostate. Prosternum not excavate. Legs moderately long, tarsi short, the posterior slightly longer.

Genotype, *Ae. fastigatus* Pasc.

The rostral structure affords the most distinctive character of this genus; the subplanate dorsum with narrow impressed median line and flattened internal ridges, and the position of the clypeal plate are very characteristic. The prothoracic sculpture shows an approach to *Bubaris*, and to a less extent to some of the other genera. The elytra show the usual two rows of tubercles; the humeral angles are well marked and advanced, sometimes markedly so.

The genus was established in 1872 by Pascoe for the reception of 3 species—*fastigatus*, *mendosus* and *inuus*, and the first of these is here designated as genotype. At the same time Pascoe referred *Euomus nodipennis* Bohem. (1843), originally described as an *Amycterus*, to *Aedriodes*. This species was among those referred by Schönherr to *Euomus* when that genus was described in 1847.

In 1903, Lea added a fifth species—*humeralis*—to the genus. In the present paper 4 additional species are proposed as new.

As in many other genera of the Euomides, the species are often ill-defined and it is difficult to differentiate satisfactorily between them. In some instances they may represent geographical races or subspecies. It is easy for instance to separate specimens of *Ae. nodipennis* from the Geraldton district from specimens of *Ae. fastigatus* from King George Sound, but specimens from Swan River, the type locality of *Ae. nodipennis*, are almost exactly intermediate between the other two.

The genus as a whole falls into two groups, the one comprising somewhat larger, and distinctly broader species, the other more elongate and narrow species.

Aedriodes appears restricted to the south-western corner of Western Australia, extending from King George Sound as far north as Geraldton and inland to Kellerberrin.

Table of Species.

- 1 (6) Form broad, robust, comparatively large.
- 2 (5) Elytral punctures small.
- 3 (4) Humeral angles strongly produced outwards as well as forwards.
Ae. fastigatus Pasc.
- 4 (3) Humeral angles advanced, but less strongly outwardly directed.
Ae. nodipennis Boh.
- 5 (2) Elytral punctures distinctly larger. *Ae. foveolatus*, n.sp.
- 6 (1) Form narrow, elongate.
- 7 (8) Elytral interstices subcostate. *Ae. humeralis* Lea.
- 8 (7) Elytral interstices tuberculate or granulate.
- 9 (10) Apices of elytra produced, conjointly mucronate. *Ae. mucronatus*, n.sp.
- 10 (9) Apices of elytra rounded, not conjointly mucronate.
- 11 (16) Anterior tibiae with a dense hirsute subapical brush on under and inner sides.
- 12 (13) Elytral tubercles comparatively large and conical. . . *Ae. mendosus* Pasc.
- 13 (12) Elytral tubercles small, or more obtuse.
- 14 (15) Size moderate (10 mm.); sculpture somewhat confused *Ae. tibialis*, n.sp.
- 15 (14) Size small (8 mm.); sculpture regular. *Ae. crawshawii*, n.sp.
- 16 (11) Anterior tibiae longer with less definite brush. *Ae. inuus* Pasc.

AEDRIODES FASTIGATUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 86, t. 1, fig. 8.

Broad, robust. Black; almost destitute of clothing, a few minute whitish squames on elytra, and a few small maculae on the sides; head with a patch of brownish squames.

Head convex. Rostrum with basal ridges wide, flattened, hardly at all raised. Scape short and thick. Prothorax widest in front of middle, with a deep median impression, deepest in anterior half, and with a shorter deep sulcus on either side of apex; disc strongly convex, closely set with round flattened granules, as it were tessellated. Elytra with subparallel sides; humeral angles marked by a strongly projecting crest; seriate punctures very small, almost obsolete, in irregular lines; interstices, with the exception of the third and fifth, not raised or granulate; third interstice incurved at base and towards declivity, from base to middle of elytra forming a strongly raised ridge, projecting anteriorly, with a single large truncate tubercle posteriorly; fifth interstice with a large outwardly and forwardly projecting humeral crest, followed by 3 tubercles, the apical one the largest. Sides with moderately large punctures, the interstices not granulate. Under surface feebly convex in basal portion with scattered setigerous punctures; apical

As in many other genera of the Euomides, the species are often ill-defined and it is difficult to differentiate satisfactorily between them. In some instances they may represent geographical races or subspecies. It is easy for instance to separate specimens of *Ae. nodipennis* from the Geraldton district from specimens of *Ae. fastigatus* from King George Sound, but specimens from Swan River, the type locality of *Ae. nodipennis*, are almost exactly intermediate between the other two.

The genus as a whole falls into two groups, the one comprising somewhat larger, and distinctly broader species, the other more elongate and narrow species.

Aedriodes appears restricted to the south-western corner of Western Australia, extending from King George Sound as far north as Geraldton and inland to Kellerberrin.

Table of Species.

- 1 (6) Form broad, robust, comparatively large.
- 2 (5) Elytral punctures small.
- 3 (4) Humeral angles strongly produced outwards as well as forwards.
Ae. fastigatus Pasc.
- 4 (3) Humeral angles advanced, but less strongly outwardly directed.
Ae. nodipennis Boh.
- 5 (2) Elytral punctures distinctly larger. *Ae. foveolatus*, n.sp.
- 6 (1) Form narrow, elongate.
- 7 (8) Elytral interstices subcostate. *Ae. humeralis* Lea.
- 8 (7) Elytral interstices tuberculate or granulate.
- 9 (10) Apices of elytra produced, conjointly mucronate. *Ae. mucronatus*, n.sp.
- 10 (9) Apices of elytra rounded, not conjointly mucronate.
- 11 (16) Anterior tibiae with a dense hirsute subapical brush on under and inner sides.
- 12 (13) Elytral tubercles comparatively large and conical. . . *Ae. mendosus* Pasc.
- 13 (12) Elytral tubercles small, or more obtuse.
- 14 (15) Size moderate (10 mm.); sculpture somewhat confused *Ae. tibialis*, n.sp.
- 15 (14) Size small (8 mm.); sculpture regular. *Ae. crawshawii*, n.sp.
- 16 (11) Anterior tibiae longer with less definite brush. *Ae. inuus* Pasc.

AEDRIODES FASTIGATUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 86, t. 1, fig. 8.

Broad, robust. Black; almost destitute of clothing, a few minute whitish squames on elytra, and a few small maculae on the sides; head with a patch of brownish squames.

Head convex. Rostrum with basal ridges wide, flattened, hardly at all raised. Scape short and thick. Prothorax widest in front of middle, with a deep median impression, deepest in anterior half, and with a shorter deep sulcus on either side of apex; disc strongly convex, closely set with round flattened granules, as it were tessellated. Elytra with subparallel sides; humeral angles marked by a strongly projecting crest; seriate punctures very small, almost obsolete, in irregular lines; interstices, with the exception of the third and fifth, not raised or granulate; third interstice incurved at base and towards declivity, from base to middle of elytra forming a strongly raised ridge, projecting anteriorly, with a single large truncate tubercle posteriorly; fifth interstice with a large outwardly and forwardly projecting humeral crest, followed by 3 tubercles, the apical one the largest. Sides with moderately large punctures, the interstices not granulate. Under surface feebly convex in basal portion with scattered setigerous punctures; apical

segment with a shallow median impression at apex. Posterior tarsi with basal joint of moderate length. *Dimensions*: Long. 5 lin. (Pascœe).

Hab.—Western Australia: Albany.

This species is closely allied to *Ae. nodipennis* Boh. and may represent the southern form of that species. It differs principally in the greater development of the humeral crests and elytral ridges and tubercles. The punctures are also smaller and less numerous, though the actual number in a stria varies in different specimens. The prothoracic granules are also somewhat flattened.

AEDRIODES NODIPENNIS Bohem.

Amycterus nodipennis Bohemann, Schönh. Gen. Cure., vii., (1), 1843, p. 68.—*Euomus id.*, Schönherr, Mant. Secund., 1847, p. 54.—*Aedriodes id.*, Pascœe, Ann. Nat. Hist., iv., 10, 1872, p. 85.

Small, broad, robust. Black, often destitute of clothing; in fresh specimens sparsely clothed with minute decumbent subsquamose pubescence varying from white to copper in colour, with patches of larger white or yellow squames near lateral border and on sides of elytra and sometimes on the declivity.

Head convex. Rostrum short, rather wider at base than at apex, moderately deeply impressed in the middle line; internal ridges hardly traceable; clypeal plate with raised margins extending basally as a median carina for a short distance. Submentum sinuate. Scrobes rather feebly curved. Antennae with short scape; funicular joints all short. Eyes subrotundate. Prothorax rounded on sides, with feeble ocular lobes; disc convex with a median and two sublateral foveiform sulci anteriorly; set with round discrete granules fused to form a ridge between the median and sublateral impressions; sides granulate above. Elytra ovate, comparatively broad; base emarginate, with humeral angles advanced and cristiform, the ends of the third interstices also advanced; dorsum with rows of moderately distinct punctures, third interstee raised into a rather low but distinct ridge extending backwards and somewhat outwards, ending about middle, and followed by a separate larger tubercle in front of declivity; fifth interstee slightly raised from base of humeral crest to about middle, followed by two or three rather small conical tubercles, the apical the largest and situated on the upper portion of the declivity. Sides with rather deep punctures, the interstices obsoletely granulate. Ventral surface flattened, with a small apical depression. Legs normal; anterior tibiae without a distinct brush; posterior tibiae with apical spur.

♀. Larger and broader, venter feebly convex; posterior tibiae without spur. *Dimensions*: ♂. 10 x 4 mm.; ♀. 11 x 5 mm.

Hab.—Western Australia: Swan River District.

The species described above appears undoubtedly to be the one described by Bohemann and from the same locality. Most of the specimens are simply labelled Swan River, others bear labels from S. Perth, Parkerville, Jandakot, and Gingin, in the same district.

At first sight these Swan River specimens would appear to belong to *Ae. fastigatus* and the species are undoubtedly closely allied, if not merely geographical races; the differences are discussed under *Ae. fastigatus*.

Though I believe the name *nodipennis* to be correctly applied to these specimens, it has been more generally affixed to a slightly different form from farther

segment with a shallow median impression at apex. Posterior tarsi with basal joint of moderate length. *Dimensions*: Long. 5 lin. (Pascœe).

Hab.—Western Australia: Albany.

This species is closely allied to *Ae. nodipennis* Boh. and may represent the southern form of that species. It differs principally in the greater development of the humeral crests and elytral ridges and tubercles. The punctures are also smaller and less numerous, though the actual number in a stria varies in different specimens. The prothoracic granules are also somewhat flattened.

AEDRIODES NODIPENNIS Bohem.

Amycterus nodipennis Bohemann, Schönh. Gen. Cure., vii., (1), 1843, p. 68.—*Euomus id.*, Schönherr, Mant. Secund., 1847, p. 54.—*Aedriodes id.*, Pascœe, Ann. Nat. Hist., iv., 10, 1872, p. 85.

Small, broad, robust. Black, often destitute of clothing; in fresh specimens sparsely clothed with minute decumbent subsquamose pubescence varying from white to copper in colour, with patches of larger white or yellow squames near lateral border and on sides of elytra and sometimes on the declivity.

Head convex. Rostrum short, rather wider at base than at apex, moderately deeply impressed in the middle line; internal ridges hardly traceable; clypeal plate with raised margins extending basally as a median carina for a short distance. Submentum sinuate. Scrobes rather feebly curved. Antennae with short scape; funicular joints all short. Eyes subrotundate. Prothorax rounded on sides, with feeble ocular lobes; disc convex with a median and two sublateral foveiform sulci anteriorly; set with round discrete granules fused to form a ridge between the median and sublateral impressions; sides granulate above. Elytra ovate, comparatively broad; base emarginate, with humeral angles advanced and cristiform, the ends of the third interstices also advanced; dorsum with rows of moderately distinct punctures, third interstices raised into a rather low but distinct ridge extending backwards and somewhat outwards, ending about middle, and followed by a separate larger tubercle in front of declivity; fifth interstices slightly raised from base of humeral crest to about middle, followed by two or three rather small conical tubercles, the apical the largest and situated on the upper portion of the declivity. Sides with rather deep punctures, the interstices obsoletely granulate. Ventral surface flattened, with a small apical depression. Legs normal; anterior tibiae without a distinct brush; posterior tibiae with apical spur.

♀. Larger and broader, venter feebly convex; posterior tibiae without spur. *Dimensions*: ♂. 10 x 4 mm.; ♀. 11 x 5 mm.

Hab.—Western Australia: Swan River District.

The species described above appears undoubtedly to be the one described by Bohemann and from the same locality. Most of the specimens are simply labelled Swan River, others bear labels from S. Perth, Parkerville, Jandakot, and Gingin, in the same district.

At first sight these Swan River specimens would appear to belong to *Ae. fastigatus* and the species are undoubtedly closely allied, if not merely geographical races; the differences are discussed under *Ae. fastigatus*.

Though I believe the name *nodipennis* to be correctly applied to these specimens, it has been more generally affixed to a slightly different form from farther

north; this I propose to regard as a variety rather than as a distinct species; I append a description but do not propose a separate name.

Var. ♂. More densely clothed with minute pubescence, generally coppery or yellowish in colour. Head, rostrum and prothorax similar to *Ae. nodipennis*. Elytra very slightly rugulose between the punctures; third interstice with distinct rounded granules, close together at base but not fused and continued on to apical tubercle practically without interruption; fifth interstice with round tubercles throughout its length, larger posteriorly and extending as one or two small spicules farther down declivity. *Dimensions*: ♂. 9 x 4 mm.; ♀. 10-12 x 4.5-6 mm.

Hab.—Western Australia: Geraldton, Cottesloe.

AEDRIODES FOVEOLATUS, n.sp.

Comparatively large; closely allied to *A. fastigatus* but with larger foveiform punctures. Black; subnitid, without clothing.

Head, rostrum and prothorax as in *A. fastigatus*. Elytra broad; base with humeral angles strongly produced into a forwardly projecting crest; disc with rows of moderately deep foveiform punctures, smaller and becoming obsolete on declivity; granules absent; third interstice somewhat incurved at base and projecting forwards, with a short row of small, conjoined tubercles ending in a larger conical tubercle about middle, and followed by a large isolated conical tubercle above declivity; fifth interstice with humeral crest projecting strongly forward and but little outward, with two or three small obtuse tubercles followed by one or two larger acutely conical tubercles on sides of declivity; sides with large, foveiform punctures. Under surface feebly convex at base of abdomen, with a large fovea at apex. Anterior tibiae not hirsute beneath. *Dimensions*: 11.5 x 5 mm.

Hab.—Western Australia: Kellerberrin (W. Crawshaw), Beverley (E. F. Du Boulay).

Described from four males, two from each locality. The species is closely allied to *Ae. fastigatus* and should perhaps be regarded as a geographical subspecies, but for the fact that there is a typical specimen of *Ae. fastigatus* before me from Kellerberrin. Possibly further collecting will tend to link up the two species.

Ae. foveolatus, in addition to the more evident punctures, differs from *Ae. fastigatus* in the structure of the basal portion of the third interstice; the number of tubercles on the interstice is however variable, and fusion would convert the interstice into a ridge as in *Ae. fastigatus*. The number of punctures in the striae is variable.

Type in author's collection; paratypes in Mr. Clark's collection and in the South Australian Museum.

AEDRIODES HUMERALIS Lea.

Lea, Trans. Roy. Soc. S. Aust., xxvii., 1903, p. 113.

This species can be readily distinguished by the characters of the third and fifth elytral interstices which are raised and subcostiform. The raised portion of the third interstice ends in a tubercle beyond the middle of the elytron, which tubercle is followed by a larger one above the declivity. The fifth interstice is almost uninterrupted from the base to the terminal tubercle which is situated slightly anterior to the large tubercle on the third interstice; both interstices are

north; this I propose to regard as a variety rather than as a distinct species; I append a description but do not propose a separate name.

Var. ♂. More densely clothed with minute pubescence, generally coppery or yellowish in colour. Head, rostrum and prothorax similar to *Ae. nodipennis*. Elytra very slightly rugulose between the punctures; third interstice with distinct rounded granules, close together at base but not fused and continued on to apical tubercle practically without interruption; fifth interstice with round tubercles throughout its length, larger posteriorly and extending as one or two small spicules farther down declivity. *Dimensions*: ♂. 9 x 4 mm.; ♀. 10-12 x 4.5-6 mm.

Hab.—Western Australia: Geraldton, Cottesloe.

AEDRIODES FOVEOLATUS, n.sp.

Comparatively large; closely allied to *A. fastigatus* but with larger foveiform punctures. Black; subnitid, without clothing.

Head, rostrum and prothorax as in *A. fastigatus*. Elytra broad; base with humeral angles strongly produced into a forwardly projecting crest; disc with rows of moderately deep foveiform punctures, smaller and becoming obsolete on declivity; granules absent; third interstice somewhat incurved at base and projecting forwards, with a short row of small, conjoined tubercles ending in a larger conical tubercle about middle, and followed by a large isolated conical tubercle above declivity; fifth interstice with humeral crest projecting strongly forward and but little outward, with two or three small obtuse tubercles followed by one or two larger acutely conical tubercles on sides of declivity; sides with large, foveiform punctures. Under surface feebly convex at base of abdomen, with a large fovea at apex. Anterior tibiae not hirsute beneath. *Dimensions*: 11.5 x 5 mm.

Hab.—Western Australia: Kellerberrin (W. Crawshaw), Beverley (E. F. Du Boulay).

Described from four males, two from each locality. The species is closely allied to *Ae. fastigatus* and should perhaps be regarded as a geographical subspecies, but for the fact that there is a typical specimen of *Ae. fastigatus* before me from Kellerberrin. Possibly further collecting will tend to link up the two species.

Ae. foveolatus, in addition to the more evident punctures, differs from *Ae. fastigatus* in the structure of the basal portion of the third interstice; the number of tubercles on the interstice is however variable, and fusion would convert the interstice into a ridge as in *Ae. fastigatus*. The number of punctures in the striae is variable.

Type in author's collection; paratypes in Mr. Clark's collection and in the South Australian Museum.

AEDRIODES HUMERALIS Lea.

Lea, Trans. Roy. Soc. S. Aust., xxvii., 1903, p. 113.

This species can be readily distinguished by the characters of the third and fifth elytral interstices which are raised and subcostiform. The raised portion of the third interstice ends in a tubercle beyond the middle of the elytron, which tubercle is followed by a larger one above the declivity. The fifth interstice is almost uninterrupted from the base to the terminal tubercle which is situated slightly anterior to the large tubercle on the third interstice; both interstices are

finely granulate. The scape appears to be short. The anterior tibiae are moderately strongly clothed with setose hairs, these, however, not forming a dense brush.

The type, for the opportunity of inspecting which I am indebted to Mr. Lea, appears to be a male.

Hab.—Western Australia: Mt. Barker.

AEDRIODES MUCRONATUS, n.sp.

Elongate, narrow, with apex strongly mucronate. Black; very sparsely clothed with exceedingly minute brownish squames.

Head and rostrum as in *A. inuus*, but scape shorter and more incrassate. Prothorax similar, but granules less depressed. Elytra elongate, apex strongly produced and conjointly mucronate; disc with closely set rather obscure punctures; interstices with small obscure granules; third interstee incurved at base and towards declivity, projecting strongly forward at base, with a conjoined row of setigero-punctate granules or low tubercles to middle, followed by two or three larger multipunctate tubercles, the last and longest situated above the declivity; fifth interstee with a strong forwardly projecting humeral crest bordered by a row of granules, and followed on the interstee by a row of four tubercles, on one side preceded by a few granules, the tubercles multipunctate, becoming larger posteriorly and ending on a level with the apical tubercle of the first row; seventh interstee visible from above, with small obsolete granules. Sides with regular rows of small punctures, the interstices not granulate. Ventral surface flattened at base. Prosternum with a prominent median tubercle behind the anterior coxae. Legs rather slender, the anterior tibiae moderately strongly hirsute beneath. *Dimensions*: 10.5 x 4 mm.

Hab.—Western Australia: Mundaring (J. Clark).

There are 5 specimens before me which appear to constitute a species distinct from any described species of *Aedriodes*; unfortunately all appear to be females.

The species is perhaps closest to *Ae. mendosus*, but differs in the produced, conjointly mucronate apex of the elytra, and in the distinctly less elevated, obtuse pluripunctate tubercles. The prosternal tubercle is also larger. The male will probably be found to possess hirsute anterior tibiae.

AEDRIODES INUUS Pasce.

Pascoe, Ann. Nat. Hist., 1872, p. 86.

♂. Elongate, narrow. Black; destitute of clothing.

Head rather strongly convex, as viewed from the side, forming a continuous curve with dorsal surface of rostrum and not separated by a marked sulcus. Rostrum very short, wider at base than at apex, forming a subtruncate cone, upper surface with apical plate somewhat raised, bordered by raised margins, these subtended by a depressed sulcus; the basal portion of the dorsal surface with two rather broad raised flattened ridges, parallel, separated by a deep median sulcus. Scrobes opening upwards and outwards, rather strongly curved. Scape moderately short and stout, not greatly incrassate. Prothorax moderately strongly and evenly rounded on sides, apex slightly produced, ocular lobes present; disc transversely convex, with a deep median depression in anterior half, thence shallowly impressed, with a smaller one on each side at apex; closely set with

finely granulate. The scape appears to be short. The anterior tibiae are moderately strongly clothed with setose hairs, these, however, not forming a dense brush.

The type, for the opportunity of inspecting which I am indebted to Mr. Lea, appears to be a male.

Hab.—Western Australia: Mt. Barker.

AEDRIODES MUCRONATUS, n.sp.

Elongate, narrow, with apex strongly mucronate. Black; very sparsely clothed with exceedingly minute brownish squames.

Head and rostrum as in *A. inuus*, but scape shorter and more incrassate. Prothorax similar, but granules less depressed. Elytra elongate, apex strongly produced and conjointly mucronate; disc with closely set rather obscure punctures; interstices with small obscure granules; third interstee incurved at base and towards declivity, projecting strongly forward at base, with a conjoined row of setigero-punctate granules or low tubercles to middle, followed by two or three larger multipunctate tubercles, the last and longest situated above the declivity; fifth interstee with a strong forwardly projecting humeral crest bordered by a row of granules, and followed on the interstee by a row of four tubercles, on one side preceded by a few granules, the tubercles multipunctate, becoming larger posteriorly and ending on a level with the apical tubercle of the first row; seventh interstee visible from above, with small obsolete granules. Sides with regular rows of small punctures, the interstices not granulate. Ventral surface flattened at base. Prosternum with a prominent median tubercle behind the anterior coxae. Legs rather slender, the anterior tibiae moderately strongly hirsute beneath. *Dimensions*: 10.5 x 4 mm.

Hab.—Western Australia: Mundaring (J. Clark).

There are 5 specimens before me which appear to constitute a species distinct from any described species of *Aedriodes*; unfortunately all appear to be females.

The species is perhaps closest to *Ae. mendosus*, but differs in the produced, conjointly mucronate apex of the elytra, and in the distinctly less elevated, obtuse pluripunctate tubercles. The prosternal tubercle is also larger. The male will probably be found to possess hirsute anterior tibiae.

AEDRIODES INUUS Pasce.

Pascoe, Ann. Nat. Hist., 1872, p. 86.

♂. Elongate, narrow. Black; destitute of clothing.

Head rather strongly convex, as viewed from the side, forming a continuous curve with dorsal surface of rostrum and not separated by a marked sulcus. Rostrum very short, wider at base than at apex, forming a subtruncate cone, upper surface with apical plate somewhat raised, bordered by raised margins, these subtended by a depressed sulcus; the basal portion of the dorsal surface with two rather broad raised flattened ridges, parallel, separated by a deep median sulcus. Scrobes opening upwards and outwards, rather strongly curved. Scape moderately short and stout, not greatly incrassate. Prothorax moderately strongly and evenly rounded on sides, apex slightly produced, ocular lobes present; disc transversely convex, with a deep median depression in anterior half, thence shallowly impressed, with a smaller one on each side at apex; closely set with

moderately small round contiguous granules. Elytra elongate, gradually widened to about level of declivity, thence narrowed to apex; base with the ends of the third and fifth interstices projecting forwards, the latter forming the humeral projection; disc with rows of small punctures, not granulate between; second interstice with a few almost obsolete granules; third slightly incurved at base, with a row of tubercles, the basal ones small, granuliform, joined to form a short low ridge, followed by 3 separate tubercles, the last the largest, conical, projecting back over the declivity; fifth projecting forwards at humeral angle, the projection lined by a row of fine granules on outer edge, then with a row of about 4 tubercles, the basal two small, the apical two large and conical. Sides rather coarsely punctate, almost cancellate, the intervening ridges somewhat raised, not granulate. Legs moderately long and thin, hind tarsi with basal joint moderately elongate. Under surface flat, apical segment with a median oval apical impression.

♀. Generally larger and somewhat more ovate; posterior tibiae without apical spur. *Dimensions*: Long. 4.5 lin. (Pascoe).

Hab.—Western Australia: King George Sound, Beverley, Parkerville, Ludlow.

Ae. inuus is perhaps the commonest species of the genus and a fair number are available for comparison. These show that the species is to some extent variable in the number and development of the tubercles and in size. Several forms have been included under *Ae. inuus* which appear to be specifically distinct, and I have described three new species in the present paper which are more or less closely related to *Ae. inuus*.

The elytral tubercles, though moderately large, are less acute than in *Ae. mendosus*, and granules are absent or only obsolete on the intermediate interstices, while the anterior tibiae though set with moderately dense bristles do not have the bristles arranged in a very distinct brush, though in one or two of the series before me there is some tendency to the formation of the brush. As in these specimens, which are typical, the anterior tibiae are also slightly longer and thinner, it is possible that more than one species are still confused under this name.

AEDRIODES TIBIALIS, n.sp.

♂. Of size and general facies of *Ae. inuus* Pasc., but differing in the clothing of the anterior tibiae. Black; head densely clothed with pale golden, appressed, subsquamose pubescence; prothorax and elytra moderately densely clothed with grey.

Head and rostrum as in *Ae. inuus*. Prothorax similar. Elytra similar in shape and general appearance, the apex rounded, not mucronate; sculpture of dorsum somewhat more rugose, the intermediate interstices granulate; second interstice with a row of low obtuse tubercles, hardly more than granules, ending before declivity; third with similar tubercles, slightly larger, culminating in a moderately large tubercle on edge of declivity; fifth interstice with humeral crest projecting forwards much as in *Ae. inuus*, followed by a row of about 5 tubercles, rounded and obtuse, the last 3 distinctly larger and the terminal one large, similar to the apical tubercle of third interstice and situated anterior to it; lateral interstices granulate. No prosternal tubercle present. Ventral surface more or less flattened, with a small apical depression. Anterior tibiae shorter than in *Ae. inuus*, with a dense brush of black bristle-like hairs on under and inner surface, extending farther on to the inner surface at apex. *Dimensions*: ♂. 10 × 4.5 mm.

moderately small round contiguous granules. Elytra elongate, gradually widened to about level of declivity, thence narrowed to apex; base with the ends of the third and fifth interstices projecting forwards, the latter forming the humeral projection; disc with rows of small punctures, not granulate between; second interstice with a few almost obsolete granules; third slightly incurved at base, with a row of tubercles, the basal ones small, granuliform, joined to form a short low ridge, followed by 3 separate tubercles, the last the largest, conical, projecting back over the declivity; fifth projecting forwards at humeral angle, the projection lined by a row of fine granules on outer edge, then with a row of about 4 tubercles, the basal two small, the apical two large and conical. Sides rather coarsely punctate, almost cancellate, the intervening ridges somewhat raised, not granulate. Legs moderately long and thin, hind tarsi with basal joint moderately elongate. Under surface flat, apical segment with a median oval apical impression.

♀. Generally larger and somewhat more ovate; posterior tibiae without apical spur. *Dimensions*: Long. 4.5 lin. (Pascoe).

Hab.—Western Australia: King George Sound, Beverley, Parkerville, Ludlow.

Ae. inuus is perhaps the commonest species of the genus and a fair number are available for comparison. These show that the species is to some extent variable in the number and development of the tubercles and in size. Several forms have been included under *Ae. inuus* which appear to be specifically distinct, and I have described three new species in the present paper which are more or less closely related to *Ae. inuus*.

The elytral tubercles, though moderately large, are less acute than in *Ae. mendosus*, and granules are absent or only obsolete on the intermediate interstices, while the anterior tibiae though set with moderately dense bristles do not have the bristles arranged in a very distinct brush, though in one or two of the series before me there is some tendency to the formation of the brush. As in these specimens, which are typical, the anterior tibiae are also slightly longer and thinner, it is possible that more than one species are still confused under this name.

AEDRIODES TIBIALIS, n.sp.

♂. Of size and general facies of *Ae. inuus* Pasc., but differing in the clothing of the anterior tibiae. Black; head densely clothed with pale golden, appressed, subsquamose pubescence; prothorax and elytra moderately densely clothed with grey.

Head and rostrum as in *Ae. inuus*. Prothorax similar. Elytra similar in shape and general appearance, the apex rounded, not mucronate; sculpture of dorsum somewhat more rugose, the intermediate interstices granulate; second interstice with a row of low obtuse tubercles, hardly more than granules, ending before declivity; third with similar tubercles, slightly larger, culminating in a moderately large tubercle on edge of declivity; fifth interstice with humeral crest projecting forwards much as in *Ae. inuus*, followed by a row of about 5 tubercles, rounded and obtuse, the last 3 distinctly larger and the terminal one large, similar to the apical tubercle of third interstice and situated anterior to it; lateral interstices granulate. No prosternal tubercle present. Ventral surface more or less flattened, with a small apical depression. Anterior tibiae shorter than in *Ae. inuus*, with a dense brush of black bristle-like hairs on under and inner surface, extending farther on to the inner surface at apex. *Dimensions*: ♂. 10 × 4.5 mm.

Hab.—Western Australia: Cunderdin (T. G. Sloane).

Described from two specimens, both males. The species closely resembles *Ae. inuus* but is distinguished by the tibial clothing; the elytral sculpture is also somewhat more rugose, though the tubercles are not larger. From *Ae. crawshawii* it differs in its larger size and more irregular elytral sculpture; and from *Ae. mendosus* in the more obtuse tubercles.

AEDRIODES CRAWSHAWI, n.sp.

♂. Small, elongate, narrow. Black; moderately densely clothed with minute, black, subsquamose pubescence, variegated on elytra with grey; sides of elytra with more conspicuous white patches.

Head and rostrum as in *Ae. inuus* Pasc., except that the dorsal ridges are rather flatter and less defined. Prothorax evenly rounded on sides, median line sulcate, deepest where it crosses anterior constriction, sublateral foveae present, situated on anterior constriction; disc closely set with small, umbilicated setigerous granules. Elytra elongate, evenly rounded, and but little widened on the sides; apex little produced, rounded not mucronate; base emarginate, the ends of the third and fifth interstices advanced; dorsum with regular rows of small closely set punctures; interstices obscurely granulate, the third interstice feebly raised, incurved at base, with somewhat obscure setigerous granules, larger posteriorly, the last 2-3 forming small tubercles, the last the largest, conical, situated on edge of declivity; fifth interstice with humeral crest advanced, but less so than in most species, the outer edge with a row of granules, continued on to interstice and followed by 5-6 small tubercles, the posterior ones subconical and extending on to declivity; seventh interstice with obscure granules. Ventral surface slightly concave at base, almost flat elsewhere, with small setigerous punctures, a small foveiform depression present at apex. Anterior tibiae with a dense black hirsute brush on under surface extending round to inner side at apex.

♀. Similar to male; slightly larger, more produced at apex. Elytra with tubercles more obtuse. Anterior tibiae less hirsute. Venter rather feebly convex. *Dimensions*: ♂. 8 x 3 mm.; ♀. 9 x 4 mm.

Hab.—Western Australia: Jandakot (W. Crawshaw).

The outstanding character of this species would appear to be the small size; there are however other characters which prevent it being regarded as a variety of any other of the described species. The smaller elytral tubercles and the strongly hirsute tibiae distinguish it from *Ae. inuus* Pasc., and the more regular elytral sculpture from *Ae. tibialis*. The extension of the tubercles of the fifth interstice on to the declivity is not absolutely constant.

I am indebted to Mr. W. Crawshaw of Jandakot for a fine series of this, the smallest species of the genus.

AEDRIODES MENDOSUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 86.

♀. Elongate, narrow. Black; rather sparsely clothed with minute almost squamose subpubescence, ochreous or metallic coppery in colour, denser on the head, sides with whitish patches.

Head as in *A. inuus*, but scape much shorter and stouter. Prothorax as in *A. inuus* but median impression somewhat deeper in basal portion. Elytra elongate, gradually widened; humeral crests larger than in *A. inuus*; disc with distinct rows of granules on and between the interstices; second interstice with more

Hab.—Western Australia: Cunderdin (T. G. Sloane).

Described from two specimens, both males. The species closely resembles *Ae. inuus* but is distinguished by the tibial clothing; the elytral sculpture is also somewhat more rugose, though the tubercles are not larger. From *Ae. crawshawii* it differs in its larger size and more irregular elytral sculpture; and from *Ae. mendosus* in the more obtuse tubercles.

AEDRIODES CRAWSHAWI, n.sp.

♂. Small, elongate, narrow. Black; moderately densely clothed with minute, black, subsquamose pubescence, variegated on elytra with grey; sides of elytra with more conspicuous white patches.

Head and rostrum as in *Ae. inuus* Pasc., except that the dorsal ridges are rather flatter and less defined. Prothorax evenly rounded on sides, median line sulcate, deepest where it crosses anterior constriction, sublateral foveae present, situated on anterior constriction; disc closely set with small, umbilicated setigerous granules. Elytra elongate, evenly rounded, and but little widened on the sides; apex little produced, rounded not mucronate; base emarginate, the ends of the third and fifth interstices advanced; dorsum with regular rows of small closely set punctures; interstices obscurely granulate, the third interstice feebly raised, incurved at base, with somewhat obscure setigerous granules, larger posteriorly, the last 2-3 forming small tubercles, the last the largest, conical, situated on edge of declivity; fifth interstice with humeral crest advanced, but less so than in most species, the outer edge with a row of granules, continued on to interstice and followed by 5-6 small tubercles, the posterior ones subconical and extending on to declivity; seventh interstice with obscure granules. Ventral surface slightly concave at base, almost flat elsewhere, with small setigerous punctures, a small foveiform depression present at apex. Anterior tibiae with a dense black hirsute brush on under surface extending round to inner side at apex.

♀. Similar to male; slightly larger, more produced at apex. Elytra with tubercles more obtuse. Anterior tibiae less hirsute. Venter rather feebly convex. *Dimensions*: ♂. 8 x 3 mm.; ♀. 9 x 4 mm.

Hab.—Western Australia: Jandakot (W. Crawshaw).

The outstanding character of this species would appear to be the small size; there are however other characters which prevent it being regarded as a variety of any other of the described species. The smaller elytral tubercles and the strongly hirsute tibiae distinguish it from *Ae. inuus* Pasc., and the more regular elytral sculpture from *Ae. tibialis*. The extension of the tubercles of the fifth interstice on to the declivity is not absolutely constant.

I am indebted to Mr. W. Crawshaw of Jandakot for a fine series of this, the smallest species of the genus.

AEDRIODES MENDOSUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 86.

♀. Elongate, narrow. Black; rather sparsely clothed with minute almost squamose subpubescence, ochreous or metallic coppery in colour, denser on the head, sides with whitish patches.

Head as in *A. inuus*, but scape much shorter and stouter. Prothorax as in *A. inuus* but median impression somewhat deeper in basal portion. Elytra elongate, gradually widened; humeral crests larger than in *A. inuus*; disc with distinct rows of granules on and between the interstices; second interstice with more

evident granules; third slightly incurved and projecting forwards at base, with a row of 8 tubercles, more or less conjoined at base, gradually increasing in size posteriorly, the last 3 conical; fifth projecting forwards in a large humeral crest, bordered on outer side by a row of small granules, and with a row of 4-5 conical tubercles, larger posteriorly. Sides with interstices broader, and punctures smaller than in *A. inuus*, with fine granules scattered on interstices. Under surface gently convex at base. Legs shorter, and almost straight. *Dimensions*: ♀. 10 x 4 mm.

Hab.—Western Australia: Albany.

The above description is taken from the type—a female—in the British Museum. A second specimen in the collection is a male, and agrees fairly closely with the female except that the scape is not so short. The anterior tibiae also are stouter than in *A. inuus* with stronger hair clothing the inner surface.

ALEXIRHEA.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 19.

Small, elongate elliptical in ♂, broader more ovate in ♀. Head convex, with a deep transverse sulcus at junction with rostrum; supraciliary ridges present. Rostrum short, wide; the upper surface with internal ridges raised in a short backwardly projecting tubercle at base; lateral margins well-defined, not raised; clypeal plate exerted; submentum dentate; scrobes strongly curved, separated from eye by a short vertical sulcus. Antennae with scape moderately short, incrassate, and short funicular joints. Eyes ovate, finely faceted. Prothorax with lateral margins rounded or with posterior half sloping in an oblique line towards base; apical margin slightly produced above head, subtruncate, with definite ocular lobes; pronotum convex, granulate. Elytra elongate in ♂, broader more ovate in ♀; base emarginate, humeral angles produced or rounded; interstices granulate, with some small tubercles about edge of declivity. Venter flattened in ♂, with a median hirsute vitta, gently convex in ♀. Legs short; tarsal joints short.

While possessing no strongly marked salient features, this genus appears quite distinct; it is possibly most nearly allied to *Bubaris*, though in some respects it seems related to *Chriotyphus*. From *Bubaris* it may be distinguished by the bituberculate rostrum, the raised ends of the internal ridges forming a pair of definite tubercles, which is not the case in *Bubaris*.

Alexirhea was proposed by Pascoe for the reception of three species—*notata*, *aurita*, and *falsifica*; subsequently a fourth species—*singularis*—was added. The separation of the different species is a matter of some difficulty even after examination of the types. *A. falsifica* is abundantly distinct, but *A. singularis* was founded on a monstrosity, and does not appear to be separable from *A. aurita*. Of the position of *A. notata* I am more doubtful and, while retaining the name for the present, think that in all probability it will in time be sunk as a synonym of *A. aurita*. The latter species is the one commonly identified in collections and I would suggest designating it as the genotype. There is another species before me represented by an undescribed female, allied to *A. falsifica*, but with projecting humeral angles. The round shoulders seem restricted to the female sex, but as is shown by the above specimen, advanced shoulders are not necessarily characteristic of the male.

All the species belong to Western Australia, *A. aurita* occurring in the Swan

evident granules; third slightly incurved and projecting forwards at base, with a row of 8 tubercles, more or less conjoined at base, gradually increasing in size posteriorly, the last 3 conical; fifth projecting forwards in a large humeral crest, bordered on outer side by a row of small granules, and with a row of 4-5 conical tubercles, larger posteriorly. Sides with interstices broader, and punctures smaller than in *A. inuus*, with fine granules scattered on interstices. Under surface gently convex at base. Legs shorter, and almost straight. *Dimensions*: ♀. 10 x 4 mm.

Hab.—Western Australia: Albany.

The above description is taken from the type—a female—in the British Museum. A second specimen in the collection is a male, and agrees fairly closely with the female except that the scape is not so short. The anterior tibiae also are stouter than in *A. inuus* with stronger hair clothing the inner surface.

ALEXIRHEA.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 19.

Small, elongate elliptical in ♂, broader more ovate in ♀. Head convex, with a deep transverse sulcus at junction with rostrum; supraciliary ridges present. Rostrum short, wide; the upper surface with internal ridges raised in a short backwardly projecting tubercle at base; lateral margins well-defined, not raised; clypeal plate exerted; submentum dentate; scrobes strongly curved, separated from eye by a short vertical sulcus. Antennae with scape moderately short, incrassate, and short funicular joints. Eyes ovate, finely faceted. Prothorax with lateral margins rounded or with posterior half sloping in an oblique line towards base; apical margin slightly produced above head, subtruncate, with definite ocular lobes; pronotum convex, granulate. Elytra elongate in ♂, broader more ovate in ♀; base emarginate, humeral angles produced or rounded; interstices granulate, with some small tubercles about edge of declivity. Venter flattened in ♂, with a median hirsute vitta, gently convex in ♀. Legs short; tarsal joints short.

While possessing no strongly marked salient features, this genus appears quite distinct; it is possibly most nearly allied to *Bubaris*, though in some respects it seems related to *Chriotyphus*. From *Bubaris* it may be distinguished by the bituberculate rostrum, the raised ends of the internal ridges forming a pair of definite tubercles, which is not the case in *Bubaris*.

Alexirhea was proposed by Pascoe for the reception of three species—*notata*, *aurita*, and *falsifica*; subsequently a fourth species—*singularis*—was added. The separation of the different species is a matter of some difficulty even after examination of the types. *A. falsifica* is abundantly distinct, but *A. singularis* was founded on a monstrosity, and does not appear to be separable from *A. aurita*. Of the position of *A. notata* I am more doubtful and, while retaining the name for the present, think that in all probability it will in time be sunk as a synonym of *A. aurita*. The latter species is the one commonly identified in collections and I would suggest designating it as the genotype. There is another species before me represented by an undescribed female, allied to *A. falsifica*, but with projecting humeral angles. The round shoulders seem restricted to the female sex, but as is shown by the above specimen, advanced shoulders are not necessarily characteristic of the male.

All the species belong to Western Australia, *A. aurita* occurring in the Swan

River district and *A. falsifica* at Geraldton; the precise locality of the type of *A. notata* is unknown.

Table of Species.

- | | | | |
|---|-----|--|-----------------------|
| 1 | (4) | Without subapical tubercle. | |
| 2 | (3) | Prothoracic lateral margins rounded. | <i>A. aurita</i> . |
| 3 | (2) | Basal portion of margin straight. | <i>A. notata</i> . |
| 4 | (1) | With a prominent conjoined subapical elytral tubercle. | |
| 5 | | Humeral angles rounded in female. | <i>A. falsifica</i> . |

ALEXIRHEA AURITA Pascoe.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 20.—*A. singularis* Pasc., Ann. Nat. Hist., (4), xvi., 1875, p. 55.

♂. Small. Densely clothed with golden brown subpubescence, variegate with grey on elytra, the grey clothing most marked across declivity; ventral surface with a black median vitta.

Head convex, separated from rostrum by a distinct transverse impression. Rostrum short; internal ridges erect and prominent at base, separated by a narrow impressed line. Scape of comparatively moderate length, strongly incrassate. Prothorax moderately strongly rounded on sides, basal angles obtuse; disc with a shallow median longitudinal impression, closely set with small round granules. Elytra elongate, very little widened posteriorly; apex rounded, not greatly produced; base rather deeply emarginate, the humeral angles produced forwards; interstices finely granulate, the second, third and base of fifth more raised, with two dentiform tubercles on the second and third (the inner the larger), forming a row across upper portion of declivity, also with two other smaller projections above declivity. Under surface flattened. *Dimensions*: ♂. 5 lines (Pascoe).

Hab.—Western Australia (Pascoe): Swan River. Gin-gin.

The above description is taken from the type in the British Museum. I do not think that *A. singularis* can be separated from *A. aurita*. The type of the former is a female and deformed, the prothorax being cleft in the middle. The following description was drawn up from the type:—

♀. Clothing dark, prothorax bivittate with lighter, elytra with a broad median stramineous band, with black maculae and a broad transverse fascia across the upper portion of declivity.

Head and rostrum as in other species; scape short, strongly incrassate. Prothorax deformed, the two sides not meeting above, closely granulate. Elytra rather broad, apex moderately strongly produced; base feebly emarginate, the humeral angles rounded; interstices granulate, the second, third and fifth slightly more raised, with somewhat larger granules above edge of declivity, two of them larger, almost tubercles, situated above the position of the lower row in *A. aurita*, also with a moderately strongly pointed tubercle on the second interstice, half-way down declivity. Ventral surface gently convex, with a short grey median vitta on fourth segment. *Dimensions*: ♀. 4½ lines (Pascoe).

With the types of Pascoe's two species I was able to compare a short series of both sexes taken by Mr. Carter at Gin-gin in Western Australia. The males varied in colour but generally speaking were darker than *A. aurita*; I can however detect no structural difference; the females appeared inseparable from *A. singularis*, the rounded shoulders being in this species evidently a sexual difference

River district and *A. falsifica* at Geraldton; the precise locality of the type of *A. notata* is unknown.

Table of Species.

- | | | | |
|---|-----|--|-----------------------|
| 1 | (4) | Without subapical tubercle. | |
| 2 | (3) | Prothoracic lateral margins rounded. | <i>A. aurita</i> . |
| 3 | (2) | Basal portion of margin straight. | <i>A. notata</i> . |
| 4 | (1) | With a prominent conjoined subapical elytral tubercle. | |
| 5 | | Humeral angles rounded in female. | <i>A. falsifica</i> . |

ALEXIRHEA AURITA Pascoe.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 20.—*A. singularis* Pasc., Ann. Nat. Hist., (4), xvi., 1875, p. 55.

♂. Small. Densely clothed with golden brown subpubescence, variegate with grey on elytra, the grey clothing most marked across declivity; ventral surface with a black median vitta.

Head convex, separated from rostrum by a distinct transverse impression. Rostrum short; internal ridges erect and prominent at base, separated by a narrow impressed line. Scape of comparatively moderate length, strongly incrassate. Prothorax moderately strongly rounded on sides, basal angles obtuse; disc with a shallow median longitudinal impression, closely set with small round granules. Elytra elongate, very little widened posteriorly; apex rounded, not greatly produced; base rather deeply emarginate, the humeral angles produced forwards; interstices finely granulate, the second, third and base of fifth more raised, with two dentiform tubercles on the second and third (the inner the larger), forming a row across upper portion of declivity, also with two other smaller projections above declivity. Under surface flattened. *Dimensions*: ♂. 5 lines (Pascoe).

Hab.—Western Australia (Pascoe): Swan River. Gin-gin.

The above description is taken from the type in the British Museum. I do not think that *A. singularis* can be separated from *A. aurita*. The type of the former is a female and deformed, the prothorax being cleft in the middle. The following description was drawn up from the type:—

♀. Clothing dark, prothorax bivittate with lighter, elytra with a broad median stramineous band, with black maculae and a broad transverse fascia across the upper portion of declivity.

Head and rostrum as in other species; scape short, strongly incrassate. Prothorax deformed, the two sides not meeting above, closely granulate. Elytra rather broad, apex moderately strongly produced; base feebly emarginate, the humeral angles rounded; interstices granulate, the second, third and fifth slightly more raised, with somewhat larger granules above edge of declivity, two of them larger, almost tubercles, situated above the position of the lower row in *A. aurita*, also with a moderately strongly pointed tubercle on the second interstice, half-way down declivity. Ventral surface gently convex, with a short grey median vitta on fourth segment. *Dimensions*: ♀. 4½ lines (Pascoe).

With the types of Pascoe's two species I was able to compare a short series of both sexes taken by Mr. Carter at Gin-gin in Western Australia. The males varied in colour but generally speaking were darker than *A. aurita*; I can however detect no structural difference; the females appeared inseparable from *A. singularis*, the rounded shoulders being in this species evidently a sexual difference

found in the female. At first sight the scape in *A. singularis* would appear to be shorter than in *A. aurita*, but after careful examination of the specimens now available I am satisfied that the apparent differences are due to variation in position.

ALEXIRHEA NOTATA Pasce.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 20, Pl. ii., fig. 4.

♀. Size comparatively large for the genus. Densely clothed with brown silky subpubescence, trivittate with white on prothorax, variegate with silvery grey or white on elytra, the lighter clothing covering the greater part of the surface.

Head separated from rostrum by a transverse impression. Rostrum with two raised subparallel ridges projecting strongly upwards and backwards at base; median line linearly impressed; lateral margins not raised, separated from the dorsal ridges by a slightly depressed area, ridges cancellate-punctate. Scape comparatively long, rather strongly incrassate. Prothorax with sides straight from basal angle to beyond middle, thence narrowed to apex, the opposite sides almost parallel; median line but little impressed, disc closely set with small round granules. Elytra rather feebly rounded on sides, apex much produced, base with humeral angles rounded, not produced; disc with punctures small, regular, concealed; interstices little raised, the fifth slightly raised at shoulder; granules, if present, obscured by the clothing; two small dentiform tubercles on the second and third interstices respectively set in a transverse line near summit of declivity, with a smaller one on each side above them. Under surface convex. *Dimensions*: ♀. $5\frac{1}{2}$ lines (Pascoe).

Hab.—Western Australia.

The foregoing description was taken from the type in the British Museum. I have seen no other specimen which exactly corresponds with the type, particularly in the shape of the sides of the prothorax, and it is possible that the specimen may be aberrant in this respect.

A series (1 ♂, 3 ♀) from Mundaring and Jandakot in the Swan River district, for which I am indebted to Messrs. Clark and Crawshaw, appear to me probably conspecific; the sides of the prothorax are straight from near the base to beyond the middle but the basal angle is somewhat more rounded than shown in Pascoe's figure; the clothing is abraded in all the specimens. The male has the humeral angles advanced and is close to *A. auritus*, but the prothorax is not evenly rounded as in that species, while there are minor differences in the size of the granules and punctures.

ALEXIRHEA FALSIFICA Pasce.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 21.

♀. Clothed with dingy subpubescence, prothorax feebly vittate near sides, humeral angles touched with grey.

Head and rostrum as in *A. aurita*; antennal scape comparatively long, strongly incrassate but less so than in *A. aurita*. Prothorax with granules somewhat more prominent, otherwise as in *A. aurita*. Elytra broader, rather strongly produced at apex, mucronate; base gently emarginate, humeral angles rounded; interstices granulate, the third and fifth more raised, with somewhat larger granules on each side near summit of declivity and also above declivity, these granules marked by denser clothing and in the position of the tubercles in *A. aurita*, also with a large long spiculiform tubercle immediately above apex.

found in the female. At first sight the scape in *A. singularis* would appear to be shorter than in *A. aurita*, but after careful examination of the specimens now available I am satisfied that the apparent differences are due to variation in position.

ALEXIRHEA NOTATA Pasce.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 20, Pl. ii., fig. 4.

♀. Size comparatively large for the genus. Densely clothed with brown silky subpubescence, trivittate with white on prothorax, variegate with silvery grey or white on elytra, the lighter clothing covering the greater part of the surface.

Head separated from rostrum by a transverse impression. Rostrum with two raised subparallel ridges projecting strongly upwards and backwards at base; median line linearly impressed; lateral margins not raised, separated from the dorsal ridges by a slightly depressed area, ridges cancellate-punctate. Scape comparatively long, rather strongly incrassate. Prothorax with sides straight from basal angle to beyond middle, thence narrowed to apex, the opposite sides almost parallel; median line but little impressed, disc closely set with small round granules. Elytra rather feebly rounded on sides, apex much produced, base with humeral angles rounded, not produced; disc with punctures small, regular, concealed; interstices little raised, the fifth slightly raised at shoulder; granules, if present, obscured by the clothing; two small dentiform tubercles on the second and third interstices respectively set in a transverse line near summit of declivity, with a smaller one on each side above them. Under surface convex. *Dimensions*: ♀. $5\frac{1}{2}$ lines (Pascoe).

Hab.—Western Australia.

The foregoing description was taken from the type in the British Museum. I have seen no other specimen which exactly corresponds with the type, particularly in the shape of the sides of the prothorax, and it is possible that the specimen may be aberrant in this respect.

A series (1 ♂, 3 ♀) from Mundaring and Jandakot in the Swan River district, for which I am indebted to Messrs. Clark and Crawshaw, appear to me probably conspecific; the sides of the prothorax are straight from near the base to beyond the middle but the basal angle is somewhat more rounded than shown in Pascoe's figure; the clothing is abraded in all the specimens. The male has the humeral angles advanced and is close to *A. auritus*, but the prothorax is not evenly rounded as in that species, while there are minor differences in the size of the granules and punctures.

ALEXIRHEA FALSIFICA Pasce.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 21.

♀. Clothed with dingy subpubescence, prothorax feebly vittate near sides, humeral angles touched with grey.

Head and rostrum as in *A. aurita*; antennal scape comparatively long, strongly incrassate but less so than in *A. aurita*. Prothorax with granules somewhat more prominent, otherwise as in *A. aurita*. Elytra broader, rather strongly produced at apex, mucronate; base gently emarginate, humeral angles rounded; interstices granulate, the third and fifth more raised, with somewhat larger granules on each side near summit of declivity and also above declivity, these granules marked by denser clothing and in the position of the tubercles in *A. aurita*, also with a large long spiculiform tubercle immediately above apex.

apparently rising from the second interstice and touching its fellow of the opposite side. Under surface convex. *Dimensions*: ♀. 5 lines (Pascoe).

Hab.—Western Australia: Champion Bay.

I have seen a number of specimens of this species but all females, the extraordinarily developed subapical tubercle may therefore be confined to the female.

SOSYTELUS.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 90.

Small, elongate, widened posteriorly. Head convex, forehead slightly depressed, supraciliary ridges present. Rostrum short and wide; the upper surface sloping downwards towards apex, straight above, depressed in midline with moderately elevated internal ridges. Scrobes strongly curved, reaching to eyes. Clypeal plate exerted, directed forwards. Submentum strongly lobed. Antennae short. Eyes ovate. Prothorax subangulate on sides, subplanate above; apical margin not produced above, ocular lobes present. Elytra rather strongly ampliate posteriorly, subplanate above; humeral angles produced. Prosternum not excavate; venter flattened. Tarsi short, the posterior somewhat longer.

Genotype, *S. lobatus* Pascoe.

In general facies this genus resembles both *Melanegis* and *Atychoria*, but is separated on account of the broader, shorter rostrum. I cannot see that it has any affinity to *Oditesus*.

But one species known of the genus—*S. lobatus* Pascoe, described in 1872. A second species—*rugicollis*—was however described by Lea (Proc. Linn. Soc. N.S. Wales, xx., 1895, p. 305). This species however is certainly not congeneric with *Sosytelus lobatus* Pasc., and in the present paper I have referred it to *Amorphorhinus*, to the species of which it is much more closely related.

SOSYTELUS LOBATUS Pascoe.

Pascoe, Ann. Nat. Hist., 1872, p. 91, t. 1, fig. 1.

♂. Small. Black; clothed with very minute sooty squames; nigro-setose.

Head convex, forehead slightly concave, feebly rugulose, with moderately well marked supraciliary ridges. Rostrum separated from head above by a transverse sulcus; short, thick, rather broad; upper surface sulcate in middle; internal ridges short, moderately prominent; the whole rather rugosely punctured. Prothorax not greatly dilatate, subangulate on sides; apex subtruncate above with well marked ocular lobes; subapical constriction marked; dorsum subplanate, with well marked, though somewhat irregular, longitudinal median and sublateral sulci; intervening surface raised, ridge-like, the whole set with small, round umbilicate granules, most distinct on the elevated portions; sides granulate above, punctate below. Elytra strongly widened from base to level of declivity, thence suddenly narrowed; base with humeral angles strongly advanced, directed slightly inwards, the ends of the third interstices also advanced. Dorsum subplanate, crossed by three, somewhat irregular, transverse ridges, the first across the middle of the elytra, the second midway between the first and the declivity, the third and most conspicuous across the edge of the declivity; third and fifth interstices raised, each with a series of elevations on the lines of the transverse ridges. Sides with regular rows of punctures; the interstices not granulate. Venter flattened, somewhat rugosely setigero-punctate.

apparently rising from the second interstice and touching its fellow of the opposite side. Under surface convex. *Dimensions*: ♀. 5 lines (Pascoe).

Hab.—Western Australia: Champion Bay.

I have seen a number of specimens of this species but all females, the extraordinarily developed subapical tubercle may therefore be confined to the female.

SOSYTELUS.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 90.

Small, elongate, widened posteriorly. Head convex, forehead slightly depressed, supraciliary ridges present. Rostrum short and wide; the upper surface sloping downwards towards apex, straight above, depressed in midline with moderately elevated internal ridges. Scrobes strongly curved, reaching to eyes. Clypeal plate exerted, directed forwards. Submentum strongly lobed. Antennae short. Eyes ovate. Prothorax subangulate on sides, subplanate above; apical margin not produced above, ocular lobes present. Elytra rather strongly ampliate posteriorly, subplanate above; humeral angles produced. Prosternum not excavate; venter flattened. Tarsi short, the posterior somewhat longer.

Genotype, *S. lobatus* Pascoe.

In general facies this genus resembles both *Melanegis* and *Atychoria*, but is separated on account of the broader, shorter rostrum. I cannot see that it has any affinity to *Oditesus*.

But one species known of the genus—*S. lobatus* Pascoe, described in 1872. A second species—*rugicollis*—was however described by Lea (Proc. Linn. Soc. N.S. Wales, xx., 1895, p. 305). This species however is certainly not congeneric with *Sosytelus lobatus* Pasc., and in the present paper I have referred it to *Amorphorhinus*, to the species of which it is much more closely related.

SOSYTELUS LOBATUS Pascoe.

Pascoe, Ann. Nat. Hist., 1872, p. 91, t. 1, fig. 1.

♂. Small. Black; clothed with very minute sooty squames; nigro-setose.

Head convex, forehead slightly concave, feebly rugulose, with moderately well marked supraciliary ridges. Rostrum separated from head above by a transverse sulcus; short, thick, rather broad; upper surface sulcate in middle; internal ridges short, moderately prominent; the whole rather rugosely punctured. Prothorax not greatly dilatate, subangulate on sides; apex subtruncate above with well marked ocular lobes; subapical constriction marked; dorsum subplanate, with well marked, though somewhat irregular, longitudinal median and sublateral sulci; intervening surface raised, ridge-like, the whole set with small, round umbilicate granules, most distinct on the elevated portions; sides granulate above, punctate below. Elytra strongly widened from base to level of declivity, thence suddenly narrowed; base with humeral angles strongly advanced, directed slightly inwards, the ends of the third interstices also advanced. Dorsum subplanate, crossed by three, somewhat irregular, transverse ridges, the first across the middle of the elytra, the second midway between the first and the declivity, the third and most conspicuous across the edge of the declivity; third and fifth interstices raised, each with a series of elevations on the lines of the transverse ridges. Sides with regular rows of punctures; the interstices not granulate. Venter flattened, somewhat rugosely setigero-punctate.

♀. More ampliate posteriorly; venter convex at base. *Dimensions*: ♂. 10 x 4 mm.; ♀. 11 x 5 mm.

Hab.—N.S. Wales: Sydney, Blackheath.

The elytral sculpture is difficult to describe adequately and somewhat variable; in some specimens the elevations on the third and fifth interstices are more marked and isolated, the cross connecting ridges being less evident. One specimen, in Mr. Lea's collection, without locality, has the elevations magnified into distinct tubercles, and the humeral crests distinctly separated from the rest of the fifth interstice.

ATYCHORIA.

Pascoe, Journ. of Ent., ii., 1865, p. 415.

Size small; widened posteriorly, produced at apex. Head convex. Rostrum moderately short, the upper surface obliquely truncate at apex, with a rather broad median furrow, the internal ridges strongly raised and thickened posteriorly, impinging on head; lateral margins straight, obscured from above by the internal ridges; clypeal plate strongly exserted. Submentum lobate. Scrobes gently curved; antennae short. Eyes ovate, strongly acuminate below, finely faceted. Prothorax rather narrow, rounded on sides, the apical margin slightly produced above, with strong ocular lobes; dorsum with median and sublateral sulci, separated by low ridges, surface granulate. Elytra widened to level of declivity, thence suddenly narrowed and produced to apex; disc subplanate. Legs comparatively short; tarsi short.

Genotype, *Atychoria funesta* Pascoe.

The genus is most closely allied to *Melanegis* from which however it differs in the more prominent rostral ridges, in the narrower prothorax and in the shorter antennae and legs. From *Sosytelus*, to which it also appears to be related, *Atychoria* differs in its relatively longer and narrower rostrum, with more elevated ridges; the prothorax is also narrower.

The genus was formed by Pascoe in 1865 (Journ. Ent., ii., p. 415) for a new and peculiar species from South Australia.

Blackburn in 1896 (Report Horn Exped., ii., Zool., p. 294) somewhat doubtfully proposed a second species—*rudis*—as a member of the genus. Blackburn's species has however no connection with *funesta* and I have removed it to *Bubaris*.

Misled by Blackburn's determination of the genus, I proposed in 1915 (Trans. Roy. Soc. S. Aust., xxxix., p. 86) the name of *Melanegis halmaturina* for what subsequently proved to be *Atychoria funesta* Pascoe. The genus therefore remains monotypic.

ATYCHORIA FUNESTA Pascoe.

Pascoe, Journ. Ent., ii., 1865, p. 416, t. xvii., fig. 22.—*Melanegis halmaturina* Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 86.

Having had an opportunity of examining the type of Pascoe's species, I now regard the Kangaroo Island species as almost certainly the same. The actual type of *funesta*, a female, is larger than *halmaturina* with somewhat different elytral prominences, but the differences are not greater than can be seen in a series of the closely related *Sosytelus tobatus*.

In describing *M. halmaturina* I did not suspect its identity with *Atychoria* as the only species known to me which had been ascribed to that genus was *Atychoria rudis* Blackb., which is not even generically closely related.

Hab.—South Australia (Pascoe): Kangaroo Island.

♀. More ampliate posteriorly; venter convex at base. *Dimensions*: ♂. 10 x 4 mm.; ♀. 11 x 5 mm.

Hab.—N.S. Wales: Sydney, Blackheath.

The elytral sculpture is difficult to describe adequately and somewhat variable; in some specimens the elevations on the third and fifth interstices are more marked and isolated, the cross connecting ridges being less evident. One specimen, in Mr. Lea's collection, without locality, has the elevations magnified into distinct tubercles, and the humeral crests distinctly separated from the rest of the fifth interstice.

ATYCHORIA.

Pascoe, Journ. of Ent., ii., 1865, p. 415.

Size small; widened posteriorly, produced at apex. Head convex. Rostrum moderately short, the upper surface obliquely truncate at apex, with a rather broad median furrow, the internal ridges strongly raised and thickened posteriorly, impinging on head; lateral margins straight, obscured from above by the internal ridges; clypeal plate strongly exerted. Submentum lobate. Scrobes gently curved; antennae short. Eyes ovate, strongly acuminate below, finely faceted. Prothorax rather narrow, rounded on sides, the apical margin slightly produced above, with strong ocular lobes; dorsum with median and sublateral sulci, separated by low ridges, surface granulate. Elytra widened to level of declivity, thence suddenly narrowed and produced to apex; disc subplanate. Legs comparatively short; tarsi short.

Genotype, *Atychoria funesta* Pascoe.

The genus is most closely allied to *Melanegis* from which however it differs in the more prominent rostral ridges, in the narrower prothorax and in the shorter antennae and legs. From *Sosytelus*, to which it also appears to be related, *Atychoria* differs in its relatively longer and narrower rostrum, with more elevated ridges; the prothorax is also narrower.

The genus was formed by Pascoe in 1865 (Journ. Ent., ii., p. 415) for a new and peculiar species from South Australia.

Blackburn in 1896 (Report Horn Exped., ii., Zool., p. 294) somewhat doubtfully proposed a second species—*rudis*—as a member of the genus. Blackburn's species has however no connection with *funesta* and I have removed it to *Bubaris*.

Misled by Blackburn's determination of the genus, I proposed in 1915 (Trans. Roy. Soc. S. Aust., xxxix., p. 86) the name of *Melanegis halmaturina* for what subsequently proved to be *Atychoria funesta* Pascoe. The genus therefore remains monotypic.

ATYCHORIA FUNESTA Pascoe.

Pascoe, Journ. Ent., ii., 1865, p. 416, t. xvii., fig. 22.—*Melanegis halmaturina* Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 86.

Having had an opportunity of examining the type of Pascoe's species, I now regard the Kangaroo Island species as almost certainly the same. The actual type of *funesta*, a female, is larger than *halmaturina* with somewhat different elytral prominences, but the differences are not greater than can be seen in a series of the closely related *Sosytelus tobatus*.

In describing *M. halmaturina* I did not suspect its identity with *Atychoria* as the only species known to me which had been ascribed to that genus was *Atychoria rudis* Blackb., which is not even generically closely related.

Hab.—South Australia (Pascoe): Kangaroo Island.

MELANEGIS.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 45.

Small; elongate. Head convex, forehead somewhat depressed, with well-marked supraciliary ridges. Rostrum short, though somewhat longer than in *Sosytelus* and relatively more slender; the upper surface deeply sulcate, with long internal ridges, lateral margins distinct; clypeus strongly exerted, looking forwards; submentum lobed. Seroles curved, shallow posteriorly. Antennae moderately long, the scape comparatively slender, funicle with the two basal joints moderately elongate, the second the longer. Eyes ovate, finely faceted. Prothorax rounded on sides, hardly produced above, ocular lobes present; dorsum subplanate, with longitudinal median and sublateral impressions. Elytra widened posteriorly; humeral angles strongly advanced; disc planate, tuberculate. Prosternum not excavate. Ventral surface flattened. Posterior tarsi moderately long.

Genotype, *Melanegis stygius* Pasce.

Melanegis presents in its general facies a strong resemblance to both *Sosytelus* and *Atychoria*. From the former, it may be differentiated by the longer rostrum, while the latter is distinguished by the peculiar form of the internal rostral ridges. The structure of prothorax and elytra is on the same plan in the three genera though there are minor differences. The legs however are somewhat longer and in this respect and in the more elongate rostrum the genus shows an affinity to *Tetralophus*.

I cannot satisfy myself that the clothing of the ventral surface of the tarsi, stressed by Pascoe, is of generic importance since other genera possess closely similar clothing.

The genus was erected by Pascoe in 1870 for a single species—*stygius*. In 1915 (Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 86) I described a second species—*halmaturinus*. This now turns out to be an *Atychoria* and a synonym of *A. funesta* Pasce., previously unknown in Australian collections.

MELANEGIS STYGIUS Pasce.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 452, t. vii., fig. 6; Lea Mém. Soc. ent. Belgique, xviii., 1910, p. 88.

Small; black; covered with brown subpubescence.

Head convex, slightly depressed in front, with a slight ridge in front of the eyes on each side. Rostrum as long as, but narrower than, the head, not separated above by a distinct impression; upper surface about one half the total width of the rostrum, deeply sulcate in median line, with prominent slightly divergent ridges, separated from the lateral borders by a narrow sublateral sulcus; lateral margins rounded in front, not conspicuously raised, and lying below the level of the internal ridges at the base. Seroles curved, extending towards but not reaching lower pole of eyes. Antennae slender, the scape comparatively long, the first two joints of funicle elongate, the second longer than the first, the remaining joints short. Prothorax subangularly rounded on sides, widest about middle; apical margin somewhat produced above, with well marked ocular lobes; disc strongly convex, with a deep rather broad median impression, becoming less marked posteriorly; also with a deep somewhat oblique sulcus on each side in anterior half; the surface between the sulci raised into ridges, the rest of the surface set with small round granules extending on to upper part of the sides. Elytra elongate, gradually widened to level of declivity, then rather abruptly rounded to apex; base emarginate, with strongly projecting humeral angles, and

MELANEGIS.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 45.

Small; elongate. Head convex, forehead somewhat depressed, with well-marked supraciliary ridges. Rostrum short, though somewhat longer than in *Sosytelus* and relatively more slender; the upper surface deeply sulcate, with long internal ridges, lateral margins distinct; clypeus strongly exerted, looking forwards; submentum lobed. Seroles curved, shallow posteriorly. Antennae moderately long, the scape comparatively slender, funicle with the two basal joints moderately elongate, the second the longer. Eyes ovate, finely faceted. Prothorax rounded on sides, hardly produced above, ocular lobes present; dorsum subplanate, with longitudinal median and sublateral impressions. Elytra widened posteriorly; humeral angles strongly advanced; disc planate, tuberculate. Prosternum not excavate. Ventral surface flattened. Posterior tarsi moderately long.

Genotype, *Melanegis stygius* Pasce.

Melanegis presents in its general facies a strong resemblance to both *Sosytelus* and *Atychoria*. From the former, it may be differentiated by the longer rostrum, while the latter is distinguished by the peculiar form of the internal rostral ridges. The structure of prothorax and elytra is on the same plan in the three genera though there are minor differences. The legs however are somewhat longer and in this respect and in the more elongate rostrum the genus shows an affinity to *Tetralophus*.

I cannot satisfy myself that the clothing of the ventral surface of the tarsi, stressed by Pascoe, is of generic importance since other genera possess closely similar clothing.

The genus was erected by Pascoe in 1870 for a single species—*stygius*. In 1915 (Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 86) I described a second species—*halmaturinus*. This now turns out to be an *Atychoria* and a synonym of *A. funesta* Pasce., previously unknown in Australian collections.

MELANEGIS STYGIUS Pasce.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 452, t. vii., fig. 6; Lea Mém. Soc. ent. Belgique, xviii., 1910, p. 88.

Small; black; covered with brown subpubescence.

Head convex, slightly depressed in front, with a slight ridge in front of the eyes on each side. Rostrum as long as, but narrower than, the head, not separated above by a distinct impression; upper surface about one half the total width of the rostrum, deeply sulcate in median line, with prominent slightly divergent ridges, separated from the lateral borders by a narrow sublateral sulcus; lateral margins rounded in front, not conspicuously raised, and lying below the level of the internal ridges at the base. Seroles curved, extending towards but not reaching lower pole of eyes. Antennae slender, the scape comparatively long, the first two joints of funicle elongate, the second longer than the first, the remaining joints short. Prothorax subangularly rounded on sides, widest about middle; apical margin somewhat produced above, with well marked ocular lobes; disc strongly convex, with a deep rather broad median impression, becoming less marked posteriorly; also with a deep somewhat oblique sulcus on each side in anterior half; the surface between the sulci raised into ridges, the rest of the surface set with small round granules extending on to upper part of the sides. Elytra elongate, gradually widened to level of declivity, then rather abruptly rounded to apex; base emarginate, with strongly projecting humeral angles, and

slight forward projections of the third interstices; disc flattened, with small punctures in fairly regular series; third interstice somewhat raised, in a row of obscure granules culminating in a small tubercle behind middle; fifth interstice with 3 very large outwardly projecting tubercles, becoming larger posteriorly, the last situated at level of declivity; seventh interstice lateral, without definite tubercles. Sides with rather larger punctures, the interstices with small obscure granules. Ventral surface flat, the intermediate segments rather long; with somewhat scattered fine setae and sparse black pubescence in the mid-line. Posterior tarsi comparatively short. *Dimensions*: ♂. 10 x 4 mm.

Hab.—Western Australia: King George Sound (Albany).

The above description was drawn up from a specimen in Mr. A. M. Lea's collection; I have however examined the type, and am certain of the identification, since I possess a second specimen, not in too good preservation, which was compared with the type.

TETRALOPHUS.

Waterhouse, Trans. Ent. Soc., ii., 1853, p. 173; Lacordaire, Gen. Coleop., vi., 1863, p. 317.

Size small to moderate; elongate, oblongate, almost parallel-sided. Head partially concealed by prothorax; supraciliary ridges present. Rostrum comparatively long and narrow, upper surface sulcate in median line with well marked internal ridges. Clypeal plate strongly exerted, looking forwards. Scrobes strongly curved. Antennae moderately long with rather long scape. Submentum lobed. Eyes ovate. Prothorax produced at each side into a strong angulate tubercle; apical margin strongly produced above; ocular lobes well developed; dorsum convex with strongly raised admedian ridges. Elytra oblongate; humeral angles strongly produced, cristaform; dorsum with two rows of tubercles, on the third and fifth interstices respectively. Posterior tarsi moderately elongate.

Genotype, *T. sculpturatus* Waterhouse.

The shape of the prothorax and the arrangement of the elytral tubercles render this genus one of the most distinct of the group. Its immediate affinities are not obvious, but the elongate rostrum suggests a relation with *Dialeptopus*, a genus in other respects strikingly different.

Tetralophus was founded by G. R. Waterhouse in 1853 for the reception of a new species—*sculpturatus*. In 1870 Pascoe described 3 additional species—*excursus*, *elevatus* and *incanus*. The first two of these however do not appear to be specifically distinct, while it is doubtful if *incanus* should be considered as more than a variety of *T. sculpturatus*. The number and development of the elytral tubercles is so subject to variation that species founded on differences in regard to the tubercles are not likely to prove distinct.

The genus is restricted to the southern portion of Victoria and South Australia, possibly extending into Western Australia. *T. sculpturatus* is the eastern species and *T. excursus* the western, *T. incanus* being also found in Victoria. I am not yet certain of the exact range of each species or whether they overlap.

TETRALOPHUS SCULPTURATUS Waterhouse.

Waterhouse, Trans. Ent. Soc., ii., 1853, p. 174; Lacordaire, Gen. Curc., Atlas, vii., t. 67, fig. 5a.

Variable in size and development of elytral tubercles; prothorax not granulate. Black; with sparse subsquamose clothing.

slight forward projections of the third interstices; disc flattened, with small punctures in fairly regular series; third interstice somewhat raised, in a row of obscure granules culminating in a small tubercle behind middle; fifth interstice with 3 very large outwardly projecting tubercles, becoming larger posteriorly, the last situated at level of declivity; seventh interstice lateral, without definite tubercles. Sides with rather larger punctures, the interstices with small obscure granules. Ventral surface flat, the intermediate segments rather long; with somewhat scattered fine setae and sparse black pubescence in the mid-line. Posterior tarsi comparatively short. *Dimensions*: ♂. 10 x 4 mm.

Hab.—Western Australia: King George Sound (Albany).

The above description was drawn up from a specimen in Mr. A. M. Lea's collection; I have however examined the type, and am certain of the identification, since I possess a second specimen, not in too good preservation, which was compared with the type.

TETRALOPHUS.

Waterhouse, Trans. Ent. Soc., ii., 1853, p. 173; Lacordaire, Gen. Coleop., vi., 1863, p. 317.

Size small to moderate; elongate, oblongate, almost parallel-sided. Head partially concealed by prothorax; supraciliary ridges present. Rostrum comparatively long and narrow, upper surface sulcate in median line with well marked internal ridges. Clypeal plate strongly exerted, looking forwards. Scrobes strongly curved. Antennae moderately long with rather long scape. Submentum lobed. Eyes ovate. Prothorax produced at each side into a strong angulate tubercle; apical margin strongly produced above; ocular lobes well developed; dorsum convex with strongly raised admedian ridges. Elytra oblongate; humeral angles strongly produced, cristaform; dorsum with two rows of tubercles, on the third and fifth interstices respectively. Posterior tarsi moderately elongate.

Genotype, *T. sculpturatus* Waterhouse.

The shape of the prothorax and the arrangement of the elytral tubercles render this genus one of the most distinct of the group. Its immediate affinities are not obvious, but the elongate rostrum suggests a relation with *Dialeptopus*, a genus in other respects strikingly different.

Tetralophus was founded by G. R. Waterhouse in 1853 for the reception of a new species—*sculpturatus*. In 1870 Pascoe described 3 additional species—*excursus*, *elevatus* and *incanus*. The first two of these however do not appear to be specifically distinct, while it is doubtful if *incanus* should be considered as more than a variety of *T. sculpturatus*. The number and development of the elytral tubercles is so subject to variation that species founded on differences in regard to the tubercles are not likely to prove distinct.

The genus is restricted to the southern portion of Victoria and South Australia, possibly extending into Western Australia. *T. sculpturatus* is the eastern species and *T. excursus* the western, *T. incanus* being also found in Victoria. I am not yet certain of the exact range of each species or whether they overlap.

TETRALOPHUS SCULPTURATUS Waterhouse.

Waterhouse, Trans. Ent. Soc., ii., 1853, p. 174; Lacordaire, Gen. Curc., Atlas, vii., t. 67, fig. 5a.

Variable in size and development of elytral tubercles; prothorax not granulate. Black; with sparse subsquamose clothing.

Head with a feeble median ridge in centre, lightly concave on each side; supraciliary ridges present, not prominent. Rostrum with internal ridges long, prominent, convergent at base, separated from the lateral margins by a space communicating with the forehead; lateral ridges low. Prothorax with lateral tubercle large, obliquely truncate, the anterior angle rounded, the posterior pointed; apex strongly produced above, subapical constriction well marked; median area strongly depressed, bounded by a strongly elevated ridge on each side, subdivided into three portions; a short ridge anterior to subapical constriction extending above head, a longer more elevated median or main portion and a small tubercle at posterior end of median portion; derm not granulate. Elytra oblongate; humeral angles with a strongly developed, outwardly and forwardly projecting tubercle, truncate at apex; third interstice with a row of tubercles, small, rounded near base, gradually increasing in size and becoming more conical posteriorly, the last situated some distance before declivity, the number of tubercles in the row inconstant, the last 2-3 sometimes united; fifth interstice bearing the large humeral tubercle, and an equally large but more conical tubercle at level of declivity, also with 2-3 smaller conical tubercles between. Ventral surface more or less flattened, with a small depressed area at extreme apex, filled with pubescence, the apical segment somewhat bulbous in front of depression.

♀. Gently convex at base of abdomen, without definite apical depression.
Dimensions: ♂. 10-13 x 3.5-5 mm.; ♀. 11-13 x 4.5-5.5 mm.

Hab.—Victoria; South Australia. Most specimens without exact locality, several labelled Lucindale, South Australia.

A very variable species in size and in the number and development of the elytral tubercles. The practically non-granulate prothorax will distinguish the species from *T. excursus* Pasc., though in several specimens there are a few granules at the base of the prothorax.

TETRALOPHUS INCANUS Pasc.

Pascoe, Trans. Entom. Soc. London, 1870, p. 453.

It is doubtful if this species should be regarded as more than a variety of *T. sculpturatus* Waterhouse. It is distinguished by the fewer tubercles on the third interstices, commonly one or two, but indications of smaller obsolescent tubercles nearer the base are sometimes present and such specimens tend to bridge the gap between *T. incanus* and typical specimens of *T. sculpturatus*. Sufficient material is not available to settle the status of the species which may prove a geographical race of *T. sculpturatus*. Most of the specimens, about 6, that I have seen were labelled either Victoria or South Australia, but one specimen is labelled as from Ararat in Victoria.

TETRALOPHUS EXCURSUS Pasc.

Pascoe, Trans. Entom. Soc. Lond., 1870, p. 453.—*T. elevatus* Pasc., l.c., p. 453.

Head and rostrum very similar to *T. sculpturatus*; submentum broadly lobed, not much produced. Prothorax broader, the ridges shorter, not extending farther back than opposite the posterior border of the lateral tubercle, without a separate nodule at the posterior end; surface granulate; sides granulate. Elytra relatively shorter and broader, with fewer and rather larger tubercles; the third interstice with a single tubercle beyond middle, sloping anteriorly with or without an

Head with a feeble median ridge in centre, lightly concave on each side; supraciliary ridges present, not prominent. Rostrum with internal ridges long, prominent, convergent at base, separated from the lateral margins by a space communicating with the forehead; lateral ridges low. Prothorax with lateral tubercle large, obliquely truncate, the anterior angle rounded, the posterior pointed; apex strongly produced above, subapical constriction well marked; median area strongly depressed, bounded by a strongly elevated ridge on each side, subdivided into three portions; a short ridge anterior to subapical constriction extending above head, a longer more elevated median or main portion and a small tubercle at posterior end of median portion; derm not granulate. Elytra oblongate; humeral angles with a strongly developed, outwardly and forwardly projecting tubercle, truncate at apex; third interstice with a row of tubercles, small, rounded near base, gradually increasing in size and becoming more conical posteriorly, the last situated some distance before declivity, the number of tubercles in the row inconstant, the last 2-3 sometimes united; fifth interstice bearing the large humeral tubercle, and an equally large but more conical tubercle at level of declivity, also with 2-3 smaller conical tubercles between. Ventral surface more or less flattened, with a small depressed area at extreme apex, filled with pubescence, the apical segment somewhat bulbous in front of depression.

♀. Gently convex at base of abdomen, without definite apical depression.
Dimensions: ♂. 10-13 x 3.5-5 mm.; ♀. 11-13 x 4.5-5.5 mm.

Hab.—Victoria; South Australia. Most specimens without exact locality, several labelled Lucindale, South Australia.

A very variable species in size and in the number and development of the elytral tubercles. The practically non-granulate prothorax will distinguish the species from *T. excursus* Pasc., though in several specimens there are a few granules at the base of the prothorax.

TETRALOPHUS INCANUS Pasc.

Pascoe, Trans. Entom. Soc. London, 1870, p. 453.

It is doubtful if this species should be regarded as more than a variety of *T. sculpturatus* Waterhouse. It is distinguished by the fewer tubercles on the third interstices, commonly one or two, but indications of smaller obsolescent tubercles nearer the base are sometimes present and such specimens tend to bridge the gap between *T. incanus* and typical specimens of *T. sculpturatus*. Sufficient material is not available to settle the status of the species which may prove a geographical race of *T. sculpturatus*. Most of the specimens, about 6, that I have seen were labelled either Victoria or South Australia, but one specimen is labelled as from Ararat in Victoria.

TETRALOPHUS EXCURSUS Pasc.

Pascoe, Trans. Entom. Soc. Lond., 1870, p. 453.—*T. elevatus* Pasc., l.c., p. 453.

Head and rostrum very similar to *T. sculpturatus*; submentum broadly lobed, not much produced. Prothorax broader, the ridges shorter, not extending farther back than opposite the posterior border of the lateral tubercle, without a separate nodule at the posterior end; surface granulate; sides granulate. Elytra relatively shorter and broader, with fewer and rather larger tubercles; the third interstice with a single tubercle beyond middle, sloping anteriorly with or without an

obscure row of granules extending to base of elytron; fifth interstices with large humeral and subapical tubercles, and one or two smaller conical tubercles between. *Dimensions*: ♂. 11-15 x 5-6 mm.; ♀. 11 x 5 mm.

Hab.—S. Australia: Mt. Lofty, Mylor, Prospect Hill; Kangaroo I.

The distinction drawn by Pascoe between *T. excursus* and *T. elevatus* does not appear to me of specific importance. The distinction was that in *T. excursus* there is a row of granules between the median tubercle on the third interstices and the base, while in *T. elevatus* the granules are absent, the tubercle merely sloping towards the base. The series before me shows that the granules vary in development so that there is a complete transition between *T. excursus* and *T. elevatus*. The granularity of the prothorax also varies to a slight extent, as well as the width of the prothorax.

The species differs from *T. sculpturatus* in the granular prothorax and in the shape of the prothoracic crests.

DIALEPTOPUS.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 450.

Moderately large species, elongate, narrow in ♂, more ovate in ♀. Head concealed to large extent by prothorax, strongly convex. Rostrum moderately long, longitudinally impressed on upper surface, with long, little prominent internal ridges; lateral margins low; clypeal plate rather strongly exerted; submentum briefly lobate. Scrobes feebly curved. Antennae moderately long. Eyes ovate, finely faceted. Prothorax with median area strongly raised above rest of surface, depressed in middle and bounded by strongly raised ridges, more or less widely separated in middle, slightly incurved towards base and strongly convergent apically projecting well over the head; lateral margins rounded; apical margin strongly produced above, with strong ocular lobes. Elytra elongate, almost parallel-sided in ♂, rather strongly ovate in ♀ and produced at apex; base strongly emarginate, the humeral angles projecting forwards, embracing the base of the prothorax; dorsum puncto-striate, the third and fifth interstices tuberculate, the third out-turned at base to join the fifth and form the humeral crest; sides puncto-striate. Prosternum gently concave with a small tubercle on each side, in front of anterior coxae. Legs long and slender; tarsi elongate, the posterior tarsi very long.

Genotype, *Amycterus collaris* Bohemann = *D. sepidioides* Pasc.

The curiously sculptured prothorax and the prominent humeral crests formed by the junction of the third and fifth interstices render this genus readily recognisable.

It is probably most closely allied to *Tetralophus*, the rostrum being similar in both genera, though the structure of prothorax and elytra differ greatly.

The genus was formed by Pascoe in 1870 (Trans. Ent. Soc. Lond., p. 450) for *Amycterus collaris* Bohem. (1843), and four new species—*ferreus*, *macilentus*, *monachus* and *sepidioides*, the latter being founded on the same species as *collaris*. Subsequently Pascoe described (Journ. Linn. Soc. xi., 1872) three additional species—*granulatus*, *plantaris* and *serricollis*, of which the first two are founded on the sexes of the same species.

Blackburn (Proc. Linn. Soc. N.S. Wales, 1890) proposed four new species—*lugubris*, *validus*, *obsoletus*, and *lindensis*, and in 1892 (*op. cit.*) a further one—*approximatus*. Only two of these species appear to be valid, as two, *validus* and *lugubris*, are founded on the one species, while *approximatus* falls to *collaris* Bohem., and *obsoletus* does not appear to be distinct from *ferreus* Pasc.

obscure row of granules extending to base of elytron; fifth interstices with large humeral and subapical tubercles, and one or two smaller conical tubercles between. *Dimensions*: ♂. 11-15 x 5-6 mm.; ♀. 11 x 5 mm.

Hab.—S. Australia: Mt. Lofty, Mylor, Prospect Hill; Kangaroo I.

The distinction drawn by Pascoe between *T. excursus* and *T. elevatus* does not appear to me of specific importance. The distinction was that in *T. excursus* there is a row of granules between the median tubercle on the third interstices and the base, while in *T. elevatus* the granules are absent, the tubercle merely sloping towards the base. The series before me shows that the granules vary in development so that there is a complete transition between *T. excursus* and *T. elevatus*. The granularity of the prothorax also varies to a slight extent, as well as the width of the prothorax.

The species differs from *T. sculpturatus* in the granular prothorax and in the shape of the prothoracic crests.

DIALEPTOPUS.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 450.

Moderately large species, elongate, narrow in ♂, more ovate in ♀. Head concealed to large extent by prothorax, strongly convex. Rostrum moderately long, longitudinally impressed on upper surface, with long, little prominent internal ridges; lateral margins low; clypeal plate rather strongly exerted; submentum briefly lobate. Scrobes feebly curved. Antennae moderately long. Eyes ovate, finely faceted. Prothorax with median area strongly raised above rest of surface, depressed in middle and bounded by strongly raised ridges, more or less widely separated in middle, slightly incurved towards base and strongly convergent apically projecting well over the head; lateral margins rounded; apical margin strongly produced above, with strong ocular lobes. Elytra elongate, almost parallel-sided in ♂, rather strongly ovate in ♀ and produced at apex; base strongly emarginate, the humeral angles projecting forwards, embracing the base of the prothorax; dorsum puncto-striate, the third and fifth interstices tuberculate, the third out-turned at base to join the fifth and form the humeral crest; sides puncto-striate. Prosternum gently concave with a small tubercle on each side, in front of anterior coxae. Legs long and slender; tarsi elongate, the posterior tarsi very long.

Genotype, *Amycterus collaris* Bohemann = *D. sepidioides* Pasc.

The curiously sculptured prothorax and the prominent humeral crests formed by the junction of the third and fifth interstices render this genus readily recognisable.

It is probably most closely allied to *Tetralophus*, the rostrum being similar in both genera, though the structure of prothorax and elytra differ greatly.

The genus was formed by Pascoe in 1870 (Trans. Ent. Soc. Lond., p. 450) for *Amycterus collaris* Bohem. (1843), and four new species—*ferreus*, *macilentus*, *monachus* and *sepidioides*, the latter being founded on the same species as *collaris*. Subsequently Pascoe described (Journ. Linn. Soc. xi., 1872) three additional species—*granulatus*, *plantaris* and *serricollis*, of which the first two are founded on the sexes of the same species.

Blackburn (Proc. Linn. Soc. N.S. Wales, 1890) proposed four new species—*lugubris*, *validus*, *obsoletus*, and *lindensis*, and in 1892 (*op. cit.*) a further one—*approximatus*. Only two of these species appear to be valid, as two, *validus* and *lugubris*, are founded on the one species, while *approximatus* falls to *collaris* Bohem., and *obsoletus* does not appear to be distinct from *ferreus* Pasc.

Lea (Proc. Linn. Soc. N.S. Wales, 1896) described three species, *echinatus*, *longipes* and *sordidus*. Of these *longipes* seems to be the same as *macilentus* Pascoe, and *sordidus* only a form of the highly variable *D. collaris* Bohem. Subsequently Lea (Trans. Roy. Soc. S. Aust., 1910) added another species, *pyriferus*, which is identical with *D. ferreus* Pascoe.

It will be seen from the above review how heavy the synonymy is in the genus. This is in part due to several of Pascoe's species not having been recognised in Australian collections, but in the main to the great variability of the species. Excluding the synonyms, nine names are retained as applying to valid species; it is possible that this number should be still further reduced, the characters upon which they are separated being rather weak.

Distribution.—The genus appears to be restricted to Western Australia and South Australia, with possibly the neighbouring portion of Victoria. *D. monachus* was described as from New South Wales, but this is certainly incorrect as regards the present boundary of that State.

Table of Species.

- | | | | |
|----|------|--|------------------------------|
| 1 | (2) | Elytra with three rows of tubercles on each side. | <i>D. echinatus</i> Lea. |
| 2 | (1) | Elytra with two rows of tubercles on each side. | |
| 3 | (4) | Width across humeral processes equal to width of prothorax. | <i>D. validus</i> Blackb. |
| 4 | (3) | Width across humeral processes less than width of prothorax. | |
| 5 | (8) | Basal segment of abdomen with a pair of conspicuous, parallel, longitudinal ridges. | |
| 6 | (7) | Apex of elytra emarginate, bluntly mucronate on each side. | <i>D. collaris</i> Bohem. |
| 7 | (6) | Apex of elytra deeply emarginate, with a long sharp process on each side. | <i>D. macilentus</i> Pascoe. |
| 8 | (5) | Basal abdominal ridges low or absent. | |
| 9 | (10) | Prothorax strongly granulate; ♂. with first posterior tarsal joint dilatate. | <i>D. plantaris</i> Pascoe. |
| 10 | (9) | Prothorax not granulate between the ridges; tarsi normal. | |
| 11 | (14) | Median area of prothorax normally widened. | |
| 12 | (13) | Punctures obsolescent; tubercles sharp, elevated. | <i>D. monachus</i> Pascoe. |
| 13 | (12) | Punctures evident, tubercles less elevated, more outwardly directed. | <i>D. ferreus</i> Pascoe. |
| 14 | (11) | Prothoracic median area less widened than usual, the apices of the ridges rather widely separated. | <i>D. lindensis</i> Pascoe. |

DIALEPTOPUS COLLARIS Bohem.

Amycterus collaris Bohemann, Schönh. Gen. Spec. Cure., vii., (1), 1843, p. 57.—*Euomus collaris*, Schönherr, Mantiss. Sec. Cure., 1847, p. 54; Lacordaire, Gen. Col., vi., 1863, p. 316, note 2.—*Dialeptopus sepidioides* Pascoe, Trans. Ent. Soc. Lond., 1870, p. 450, t. 7, fig. 4a; Blackburn, Proc. Linn. Soc. N.S. Wales, (Ser. 2), v., 1890, p. 581; Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25; Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 88.—*D. approximatus*, Blackb., Proc. Linn. Soc. N.S. Wales, vii., 1892, p. 124.—*D. sordidus*, Lea, Proc. Linn. Soc. N.S. Wales, xxi., 1896, p. 297.

This species is extremely variable in size and in the elytral tuberculation. After the examination of a long series of specimens from various parts of Western Australia I am led to the conclusion that all the forms belong to but one species,

Lea (Proc. Linn. Soc. N.S. Wales, 1896) described three species, *echinatus*, *longipes* and *sordidus*. Of these *longipes* seems to be the same as *macilentus* Pascoe, and *sordidus* only a form of the highly variable *D. collaris* Bohem. Subsequently Lea (Trans. Roy. Soc. S. Aust., 1910) added another species, *pyriferus*, which is identical with *D. ferreus* Pascoe.

It will be seen from the above review how heavy the synonymy is in the genus. This is in part due to several of Pascoe's species not having been recognised in Australian collections, but in the main to the great variability of the species. Excluding the synonyms, nine names are retained as applying to valid species; it is possible that this number should be still further reduced, the characters upon which they are separated being rather weak.

Distribution.—The genus appears to be restricted to Western Australia and South Australia, with possibly the neighbouring portion of Victoria. *D. monachus* was described as from New South Wales, but this is certainly incorrect as regards the present boundary of that State.

Table of Species.

- | | | | |
|----|------|--|------------------------------|
| 1 | (2) | Elytra with three rows of tubercles on each side. | <i>D. echinatus</i> Lea. |
| 2 | (1) | Elytra with two rows of tubercles on each side. | |
| 3 | (4) | Width across humeral processes equal to width of prothorax. | <i>D. validus</i> Blackb. |
| 4 | (3) | Width across humeral processes less than width of prothorax. | |
| 5 | (8) | Basal segment of abdomen with a pair of conspicuous, parallel, longitudinal ridges. | |
| 6 | (7) | Apex of elytra emarginate, bluntly mucronate on each side. | <i>D. collaris</i> Bohem. |
| 7 | (6) | Apex of elytra deeply emarginate, with a long sharp process on each side. | <i>D. macilentus</i> Pascoe. |
| 8 | (5) | Basal abdominal ridges low or absent. | |
| 9 | (10) | Prothorax strongly granulate; ♂. with first posterior tarsal joint dilatate. | <i>D. plantaris</i> Pascoe. |
| 10 | (9) | Prothorax not granulate between the ridges; tarsi normal. | |
| 11 | (14) | Median area of prothorax normally widened. | |
| 12 | (13) | Punctures obsolescent; tubercles sharp, elevated. | <i>D. monachus</i> Pascoe. |
| 13 | (12) | Punctures evident, tubercles less elevated, more outwardly directed. | <i>D. ferreus</i> Pascoe. |
| 14 | (11) | Prothoracic median area less widened than usual, the apices of the ridges rather widely separated. | <i>D. lindensis</i> Pascoe. |

DIALEPTOPUS COLLARIS Bohem.

Amycterus collaris Bohemann, Schönh. Gen. Spec. Cure., vii., (1), 1843, p. 57.—*Euomus collaris*, Schönherr, Mantiss. Sec. Cure., 1847, p. 54; Lacordaire, Gen. Col., vi., 1863, p. 316, note 2.—*Dialeptopus sepidioides* Pascoe, Trans. Ent. Soc. Lond., 1870, p. 450, t. 7, fig. 4a; Blackburn, Proc. Linn. Soc. N.S. Wales, (Ser. 2), v., 1890, p. 581; Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25; Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 88.—*D. approximatus*, Blackb., Proc. Linn. Soc. N.S. Wales, vii., 1892, p. 124.—*D. sordidus*, Lea, Proc. Linn. Soc. N.S. Wales, xxi., 1896, p. 297.

This species is extremely variable in size and in the elytral tuberculation. After the examination of a long series of specimens from various parts of Western Australia I am led to the conclusion that all the forms belong to but one species,

and that the species described by Pascoe, Blackburn and Lea cannot be maintained as distinct.

Fresh specimens are more or less densely clothed and much of the surface of the elytra is covered with an enamel which readily becomes abraded or discoloured. The sexes differ greatly in form, the male being elongate and narrow, while the female is strongly ovate. The elytral tubercles are also stronger in the male than in the female.

These tubercles in the male vary from 5 to 9 in number on the third interstice, and from 3 to 7 on the fifth interstice. The usual number appears to be 6-7 on the third interstice and 4-5 on the fifth. Usually there are some small granules extending from the base of the humeral crests to the definite tubercles on the third interstice; the length of the row of granules varies and it is often difficult to decide where the tubercles actually start; in some, particularly in the females, this portion of the interstice may be subcostate. The tubercles often differ on the two elytra of the same specimen. The foveiform punctures vary somewhat in size and distinctness, depending to some extent on the degree of abrasion of the clothing. On the basal ventral surface are two prominent short longitudinal ridges between the hind coxae and the mid-line. These are present also in *D. macilentus*, but obsolete though traceable in *D. monachus* and *D. ferreus*.

The length varies from 14 to 17 mm. in the male, and from 13 to 17 mm. in the female.

In describing *D. approximatus* Blackburn stated that the second joint of the posterior tarsi was but little shorter than the first; Mr. Carter at my request examined the type and informs me that the second joint is about one-third shorter, which is the case normally in *D. collaris*.

DIALEPTOPUS SERRICOLLIS Pasc.

Pascoe, Journ. Linn. Soc., xi., 1872, p. 449.

♀. Of moderate size, strongly ovate. Black, elytral tubercles reddish; head and rostrum clothed with yellow subpubescence.

Rostrum parallel-sided, with parallel internal ridges, the median line hardly depressed. Prothorax with median area narrowly pyriform in shape, moderately deep, bounded by the submedian ridges, the latter fading away posteriorly not abruptly terminated and set with strongly setigerous granules rather confusedly arranged; lateral ridges strongly convex, granulate. Elytra obese, strongly ovoid, humeral crests rather close and small, but well advanced, each with several conical granules on the outer edge; third interstice with 6-7 tubercles, closely set, almost spiniform, the last half way down declivity, also one or two granules at base of interstice; fifth interstice with a row of tubercles continued from spicules of crest, consisting of 6 strongly conical spiniform tubercles, outwardly projecting, the apical tubercle almost reaching the same posterior level as the last tubercle of third interstice; punctures on dorsum well marked and deep. Sides with rather large and deep punctures, the interstices not carinate. Beneath convex, apical impression obsolescent. *Dimensions*: ♀. 13 x 5 mm.

Hab.—Western Australia.

The above description was taken from the type in the British Museum; I have not seen another specimen of the species.

As the male is unknown I have not included the species in the tabulation of the genus, but in all probability it comes closest to *D. collaris*, from which it is

and that the species described by Pascoe, Blackburn and Lea cannot be maintained as distinct.

Fresh specimens are more or less densely clothed and much of the surface of the elytra is covered with an enamel which readily becomes abraded or discoloured. The sexes differ greatly in form, the male being elongate and narrow, while the female is strongly ovate. The elytral tubercles are also stronger in the male than in the female.

These tubercles in the male vary from 5 to 9 in number on the third interstice, and from 3 to 7 on the fifth interstice. The usual number appears to be 6-7 on the third interstice and 4-5 on the fifth. Usually there are some small granules extending from the base of the humeral crests to the definite tubercles on the third interstice; the length of the row of granules varies and it is often difficult to decide where the tubercles actually start; in some, particularly in the females, this portion of the interstice may be subcostate. The tubercles often differ on the two elytra of the same specimen. The foveiform punctures vary somewhat in size and distinctness, depending to some extent on the degree of abrasion of the clothing. On the basal ventral surface are two prominent short longitudinal ridges between the hind coxae and the mid-line. These are present also in *D. macilentus*, but obsolete though traceable in *D. monachus* and *D. ferreus*.

The length varies from 14 to 17 mm. in the male, and from 13 to 17 mm. in the female.

In describing *D. approximatus* Blackburn stated that the second joint of the posterior tarsi was but little shorter than the first; Mr. Carter at my request examined the type and informs me that the second joint is about one-third shorter, which is the case normally in *D. collaris*.

DIALEPTOPUS SERRICOLLIS Pasc.

Pascoe, Journ. Linn. Soc., xi., 1872, p. 449.

♀. Of moderate size, strongly ovate. Black, elytral tubercles reddish; head and rostrum clothed with yellow subpubescence.

Rostrum parallel-sided, with parallel internal ridges, the median line hardly depressed. Prothorax with median area narrowly pyriform in shape, moderately deep, bounded by the submedian ridges, the latter fading away posteriorly not abruptly terminated and set with strongly setigerous granules rather confusedly arranged; lateral ridges strongly convex, granulate. Elytra obese, strongly ovoid, humeral crests rather close and small, but well advanced, each with several conical granules on the outer edge; third interstice with 6-7 tubercles, closely set, almost spiniform, the last half way down declivity, also one or two granules at base of interstice; fifth interstice with a row of tubercles continued from spicules of crest, consisting of 6 strongly conical spiniform tubercles, outwardly projecting, the apical tubercle almost reaching the same posterior level as the last tubercle of third interstice; punctures on dorsum well marked and deep. Sides with rather large and deep punctures, the interstices not carinate. Beneath convex, apical impression obsolescent. *Dimensions*: ♀. 13 x 5 mm.

Hab.—Western Australia.

The above description was taken from the type in the British Museum; I have not seen another specimen of the species.

As the male is unknown I have not included the species in the tabulation of the genus, but in all probability it comes closest to *D. collaris*, from which it is

distinguished by the marked granularity of the prothoracic ridges and humeral crests.

DIALEPTOPUS MACILENTUS Pasc.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 451.—*D. longipes* Lea, Proc. Linn. Soc. N.S. Wales, xxi., 1896, p. 296; Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25.

The type (♂) of *D. macilentus* Pasc. was examined at the British Museum; it is labelled as being from South Australia, though other specimens in the same collection are labelled Albany. The series from Albany and Mt. Barker recorded by Lea (Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25) certainly belong to this species. As these specimens were considered by Lea to be conspecific with *D. longipes* Lea, this name falls into synonymy.

DIALEPTOPUS MONACHUS Pasc.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 451.

♀. Size moderately large; ovate. Black; densely covered with yellowish meal, with evidence of white enamelling on the upper surfaces of the tubercles.

Head convex, separated from rostrum by a semilunar impression. Rostrum moderately long, median area deeply depressed, internal ridges prominent, convergent posteriorly. Scape of moderate length and stoutness. Prothorax of usual form, the median crests projecting over the head, enclosing a wide shallow pyriform area, the ridges approximated anteriorly and most widely separated posteriorly, where they end rather abruptly in front of base; lateral ridges rather strongly convex, subgranulate. Elytra moderately ampliate, apex not greatly produced, humeral crests normally advanced as in genus; derm and punctures obscured by meal; first row of tubercles 7-6 in number, basally degenerating into a continuous ridge outwardly directed and running on to humeral crest, the other tubercles strongly developed subtriangular, erect, with little lateral inclination; second row with 4-5 sharply cut, triangular tubercles, strongly outwardly directed, the base of the interstice forming the outer ridge of the humeral crest. Sides with only the interstices showing through the meal. Ventral surface convex, sparsely setigerous; apical segment with a circular pit at apex. *Dimensions*: ♀. 14 x 6 mm.

Hab.—South Australia.

The above description was taken from the type, a female, in the British Museum. Another female in the same institution has the derm more abraded and open subobsolete punctures are visible, also each of the tubercles of the inner row shows evidence of a single shallow depression.

A fairly extensive series in the collection of the South Australian Museum was commented upon by me in a former paper (Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 64, No. 231) without however a name being attached to the specimens. Examination of Pascoe's types showed that this series was referable to *D. monachus* Pasc.

The male differs in being smaller and narrower, almost with subparallel sides, and the elytral tubercles are larger and more acute; the ventral surface is flattened and the basal segment is obsoletely ridged, the parallel ridges described in *D. collaris* being present but low and only visible from certain directions.

distinguished by the marked granularity of the prothoracic ridges and humeral crests.

DIALEPTOPUS MACILENTUS Pasc.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 451.—*D. longipes* Lea, Proc. Linn. Soc. N.S. Wales, xxi., 1896, p. 296; Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25.

The type (♂) of *D. macilentus* Pasc. was examined at the British Museum; it is labelled as being from South Australia, though other specimens in the same collection are labelled Albany. The series from Albany and Mt. Barker recorded by Lea (Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25) certainly belong to this species. As these specimens were considered by Lea to be conspecific with *D. longipes* Lea, this name falls into synonymy.

DIALEPTOPUS MONACHUS Pasc.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 451.

♀. Size moderately large; ovate. Black; densely covered with yellowish meal, with evidence of white enamelling on the upper surfaces of the tubercles.

Head convex, separated from rostrum by a semilunar impression. Rostrum moderately long, median area deeply depressed, internal ridges prominent, convergent posteriorly. Scape of moderate length and stoutness. Prothorax of usual form, the median crests projecting over the head, enclosing a wide shallow pyriform area, the ridges approximated anteriorly and most widely separated posteriorly, where they end rather abruptly in front of base; lateral ridges rather strongly convex, subgranulate. Elytra moderately ampliate, apex not greatly produced, humeral crests normally advanced as in genus; derm and punctures obscured by meal; first row of tubercles 7-6 in number, basally degenerating into a continuous ridge outwardly directed and running on to humeral crest, the other tubercles strongly developed subtriangular, erect, with little lateral inclination; second row with 4-5 sharply cut, triangular tubercles, strongly outwardly directed, the base of the interstice forming the outer ridge of the humeral crest. Sides with only the interstices showing through the meal. Ventral surface convex, sparsely setigerous; apical segment with a circular pit at apex. *Dimensions*: ♀. 14 x 6 mm.

Hab.—South Australia.

The above description was taken from the type, a female, in the British Museum. Another female in the same institution has the derm more abraded and open subobsolete punctures are visible, also each of the tubercles of the inner row shows evidence of a single shallow depression.

A fairly extensive series in the collection of the South Australian Museum was commented upon by me in a former paper (Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 64, No. 231) without however a name being attached to the specimens. Examination of Pascoe's types showed that this series was referable to *D. monachus* Pasc.

The male differs in being smaller and narrower, almost with subparallel sides, and the elytral tubercles are larger and more acute; the ventral surface is flattened and the basal segment is obsoletely ridged, the parallel ridges described in *D. collaris* being present but low and only visible from certain directions.

DIALEPTOPUS FERREUS Pasc.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 451.—*D. obsoletus* Blackb., Proc. Linn. Soc. N.S. Wales, 1890, p. 579.—*D. pyriferus* Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25.

I have examined the type (♂.) of Pascoe's species in the British Museum and cannot separate it from *D. pyriferus* Lea. The type of *D. obsoletus* Blackb., was also examined and I consider it to belong to the same species. It is a female with the tubercles less strongly developed, probably an individual variation.

D. ferreus is very closely allied to *D. monachus* and I doubt if it should be maintained as distinct. The elytral tubercles are as a rule more obtuse and more outwardly directed, while the punctures are larger, more foveiform and tend to impinge on the tubercles to a greater extent. It must be admitted that while intermediate forms occur, under *D. monachus* have been included a number of variations which further series may show to be of specific or subspecific rank. I think it well therefore for the present to maintain *D. ferreus* as distinct from *D. monachus*.

DIALEPTOPUS LINDENSIS Blackb.

Blackburn, Proc. Linn. Soc. N.S. Wales, 1890, p. 580.

An elongate narrow species with few but strong elytral tubercles and with rather characteristic prothoracic crests, comparatively widely separated at apex and less divergent than usual in the middle.

DIALEPTOPUS PLANTARIS Pasc.

Pascoe, Journ. Linn. Soc. xi., 1872, p. 449, t. 12, fig. 11.—*D. granulatus* Pascoe, *loc. cit.*, p. 449; Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 88.

♂. Elongate-ovate. Black; covered with minute greyish clothing, with larger coppery squames in depressions.

Head completely concealed by the prothorax. Rostrum moderately long, the upper surface plane with the ridges obsolete. Prothorax with median area hardly depressed except for median line, the surface and ridges (which form the edges of the median area and are hardly different from it) closely set with moderately large round setigerous granules; the ridges parallel in anterior portion, then directed outwards to form a median angle, from which they are more gradually inclined to base; sublateral areas bare of clothing and without granules; lateral ridges evenly curved outwards in middle, granulate; sides granulate. Elytra elongate, ovate, humeral angles produced forwards, not outwards; disc with moderately well defined rows of punctures, with granules between; third interstice with granules at base, extending out to humeral angle, also with 4 strong conical tubercles, the last one situated on the edge of the declivity; fifth interstice with a row of 5 tubercles, larger posteriorly, extending from base of humeral crest but ending anteriorly to apical tubercle of third interstice; humeral crests not excavate between the ends of the third and fifth interstices, and set all over with round granules. Ventral surface flattened, with a few golden setae in middle; no ridges at base. Tarsi with basal joint much enlarged and thickened, on the middle and posterior legs, the posterior pair especially dilated.

♀. Resembles ♂, but larger and more obese, with the tarsal joints elongate and slender. *Dimensions*: ♂. 12 x 5 mm.; ♀. 15 x 6 mm.

Hab.—Western Australia: Geraldton.

DIALEPTOPUS FERREUS Pasc.

Pascoe, Trans. Ent. Soc. Lond., 1870, p. 451.—*D. obsoletus* Blackb., Proc. Linn. Soc. N.S. Wales, 1890, p. 579.—*D. pyriferus* Lea, Trans. Roy. Soc. S. Aust., xxxiv., 1910, p. 25.

I have examined the type (♂.) of Pascoe's species in the British Museum and cannot separate it from *D. pyriferus* Lea. The type of *D. obsoletus* Blackb., was also examined and I consider it to belong to the same species. It is a female with the tubercles less strongly developed, probably an individual variation.

D. ferreus is very closely allied to *D. monachus* and I doubt if it should be maintained as distinct. The elytral tubercles are as a rule more obtuse and more outwardly directed, while the punctures are larger, more foveiform and tend to impinge on the tubercles to a greater extent. It must be admitted that while intermediate forms occur, under *D. monachus* have been included a number of variations which further series may show to be of specific or subspecific rank. I think it well therefore for the present to maintain *D. ferreus* as distinct from *D. monachus*.

DIALEPTOPUS LINDENSIS Blackb.

Blackburn, Proc. Linn. Soc. N.S. Wales, 1890, p. 580.

An elongate narrow species with few but strong elytral tubercles and with rather characteristic prothoracic crests, comparatively widely separated at apex and less divergent than usual in the middle.

DIALEPTOPUS PLANTARIS Pasc.

Pascoe, Journ. Linn. Soc. xi., 1872, p. 449, t. 12, fig. 11.—*D. granulatus* Pascoe, *loc. cit.*, p. 449; Lea, Mém. Soc. entom. Belgique, xviii., 1910, p. 88.

♂. Elongate-ovate. Black; covered with minute greyish clothing, with larger coppery squames in depressions.

Head completely concealed by the prothorax. Rostrum moderately long, the upper surface plane with the ridges obsolete. Prothorax with median area hardly depressed except for median line, the surface and ridges (which form the edges of the median area and are hardly different from it) closely set with moderately large round setigerous granules; the ridges parallel in anterior portion, then directed outwards to form a median angle, from which they are more gradually inclined to base; sublateral areas bare of clothing and without granules; lateral ridges evenly curved outwards in middle, granulate; sides granulate. Elytra elongate, ovate, humeral angles produced forwards, not outwards; disc with moderately well defined rows of punctures, with granules between; third interstice with granules at base, extending out to humeral angle, also with 4 strong conical tubercles, the last one situated on the edge of the declivity; fifth interstice with a row of 5 tubercles, larger posteriorly, extending from base of humeral crest but ending anteriorly to apical tubercle of third interstice; humeral crests not excavate between the ends of the third and fifth interstices, and set all over with round granules. Ventral surface flattened, with a few golden setae in middle; no ridges at base. Tarsi with basal joint much enlarged and thickened, on the middle and posterior legs, the posterior pair especially dilated.

♀. Resembles ♂, but larger and more obese, with the tarsal joints elongate and slender. *Dimensions*: ♂. 12 x 5 mm.; ♀. 15 x 6 mm.

Hab.—Western Australia: Geraldton.

Described from types of *D. plantaris* and *D. granulatus* in the British Museum.

D. plantaris differs from every other known species of the genus in the shape of the prothoracic ridges, in the granularity of the prothorax and in the tarsal joints of the male.

DIALEPTOPUS VALIDUS Blackb.

Blackburn, Proc. Linn. Soc. N.S. Wales, 1890, p. 577.—*D. lugubris* Blackb., *loc. cit.*, p. 578; Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 63.

I have examined the types of Blackburn's species, now in the British Museum. Each species is represented by a single specimen, evidently the ♂ holotype as determined by Blackburn. A comparison of the specimens showed that they certainly belong to but one species, the type of *D. validus* being a ♀, and that of *D. lugubris* a ♂. It is evident from Blackburn's comments that he was by no means certain of the sexes of his specimens.

In my previous notes I used both names as applying to distinct species. I am now of opinion however that all the specimens then examined as well as others in various collections belong to a single, somewhat variable species.

It might be added that in the type of *D. validus* the scape is lying back, thus appearing shorter than is really the case.

DIALEPTOPUS ECHINATUS Lea.

Lea, Proc. Linn. Soc. N.S. Wales, xxi., 1896, p. 295; Trans. Royal Soc. S. Aust., xxxiv., 1910, p. 24.

This species is readily distinguished from all others by possessing three rows of tubercles on each elytron, large and acute in the male, shorter and obtuse in the female. Fresh specimens show beautiful black and white longitudinal vittae, but specimens are difficult to keep in this condition as the white enamel becomes abraded or darkened by grease. Specimens vary somewhat in shape, some being much narrower than usual, but this seems to be an individual variation.

CUCULLOTHORAX.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 88.

The clypeal plate is definitely though not strongly exerted, and the submentum is obtusely lobed in the mid line; there is no lateral impression on the rostrum below the scrobe and above the jowl. The anterior constriction, which surrounds the prothorax in most Amycterid genera, is wanting, and ocular lobes are practically absent though stated to be present in the original description. The two basal abdominal segments that are visible appear to be completely soldered together in the middle though the suture is distinct at the sides.

The above details are given to complete the original description; they are taken however not from the type but from the Warren River specimen. In the second line of the generic description the upper-surface should be read in place of under-surface.

CUCULLOTHORAX HORRIDUS Ferg.

Ferguson, *loc. cit.*, p. 89.

Hab.—Western Australia: Mt. Barker. Warren River.

ODITESUS.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 88.

Described from types of *D. plantaris* and *D. granulatus* in the British Museum.

D. plantaris differs from every other known species of the genus in the shape of the prothoracic ridges, in the granularity of the prothorax and in the tarsal joints of the male.

DIALEPTOPUS VALIDUS Blackb.

Blackburn, Proc. Linn. Soc. N.S. Wales, 1890, p. 577.—*D. lugubris* Blackb., loc. cit., p. 578; Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 63.

I have examined the types of Blackburn's species, now in the British Museum. Each species is represented by a single specimen, evidently the ♂ holotype as determined by Blackburn. A comparison of the specimens showed that they certainly belong to but one species, the type of *D. validus* being a ♀, and that of *D. lugubris* a ♂. It is evident from Blackburn's comments that he was by no means certain of the sexes of his specimens.

In my previous notes I used both names as applying to distinct species. I am now of opinion however that all the specimens then examined as well as others in various collections belong to a single, somewhat variable species.

It might be added that in the type of *D. validus* the scape is lying back, thus appearing shorter than is really the case.

DIALEPTOPUS ECHINATUS Lea.

Lea, Proc. Linn. Soc. N.S. Wales, xxi., 1896, p. 295; Trans. Royal Soc. S. Aust., xxxiv., 1910, p. 24.

This species is readily distinguished from all others by possessing three rows of tubercles on each elytron, large and acute in the male, shorter and obtuse in the female. Fresh specimens show beautiful black and white longitudinal vittae, but specimens are difficult to keep in this condition as the white enamel becomes abraded or darkened by grease. Specimens vary somewhat in shape, some being much narrower than usual, but this seems to be an individual variation.

CUCULLOTHORAX.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 88.

The clypeal plate is definitely though not strongly exerted, and the submentum is obtusely lobed in the mid line; there is no lateral impression on the rostrum below the scrobe and above the jowl. The anterior constriction, which surrounds the prothorax in most Amycterid genera, is wanting, and ocular lobes are practically absent though stated to be present in the original description. The two basal abdominal segments that are visible appear to be completely soldered together in the middle though the suture is distinct at the sides.

The above details are given to complete the original description; they are taken however not from the type but from the Warren River specimen. In the second line of the generic description the upper-surface should be read in place of under-surface.

CUCULLOTHORAX HORRIDUS Ferg.

Ferguson, loc. cit., p. 89.

Hab.—Western Australia: Mt. Barker. Warren River.

ODITESUS.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 88.

Size small. Head strongly concave in front, with well-marked supraciliary ridges. Rostrum comparatively short, the upper surface flat or gently concave in anterior portion, the internal ridges raised at base into a strongly projecting crest; external margins low; clypeal plate strongly exerted; submentum dentate; mandibles prominent, overlapping, strongly toothed. Scrobes curved, extending down towards lower margin of eye. Eyes ovate, finely faceted. Prothorax flattened above, hexagonal in outline, with a dentiform tubercle at middle of lateral margins; apex slightly produced, subtruncate above, ocular lobes well marked; surface granulate. Elytra oval, convex; humeral angles with upstanding crests; with two rows of tubercles and infra-humeral spine. Legs rather long and thin; tarsi comparatively slender, the posterior with basal joints elongate.

Genotype, *O. indutus* Pasc.

Oditesus forms one of a small group of genera characterised by the possession of prominent rostral crests or tubercles. In general habit it perhaps most closely resembles *Polyereta* and *Ennothus*, but is distinguished from these by the possession of ocular lobes. *Acherres* is distinguished by the peculiar shape of the prothorax, while the new genus described below is also differentiated on this structure.

The genus was described by Pascoe in 1872 for 6 species—*indutus*, *lycosarius*, *incoenis*, *perditus*, *sulcirostris* and *buceros*. I have examined the types of these and can only conclude that the first 4 names belong to but one variable species. The other two are more distinct, though it is still questionable whether they should be regarded as more than varietal forms.

Lea in 1903 described one species—*tibialis*—which, on account of the difference in the structure of the prothorax, I have thought advisable to remove to a new genus.

Oditesus appears to be restricted to the south-western portion of the continent, the range extending from King George Sound to Geraldton.

Table of Species.

- 1 (4) Size small; interstices tuberculate.
- 2 (3) Rostral crests large, more or less completely conjoined *O. indutus* Pasc.
- 3 (2) Rostral crests small, separate. *O. sulcirostris* Pasc.
- 4 (1) Size larger; interstices at least partially costate. *O. buceros* Pasc.

ODITESUS INDUTUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 88, t. 1, fig. 6.—*O. incoenis* Pasc., *loc. cit.*, p. 89.—*O. lycosarius* Pasc., *loc. cit.*, p. 89.—*O. perditus* Pasc., *loc. cit.*, p. 89.

Small, ovate. Black, moderately densely clothed with minute subsquamosity, varying in colour from grey to brown (obscured by dirt in type of *O. indutus*), sometimes appearing darker and with metallic copper reflections.

Head broad, gently transversely concave, with somewhat raised supraocular borders. Rostrum comparatively narrow, hardly excavate in front; basal crests large, erect, conical, conjoined at base, otherwise separated by a deep fissure, the apices divergent, this fissure extending anteriorly as a slight longitudinal impression. Prothorax flat disc-like above, with a shallow median sulcus; sub-apical impression broad though somewhat ill-defined; anterior margin slightly produced, with 4 small dentiform projections; lateral margins with a short spine in front of middle and smaller ones anterior and posterior to it; disc with small granules, with one or two rather larger granules on either side of median line;

Size small. Head strongly concave in front, with well-marked supraciliary ridges. Rostrum comparatively short, the upper surface flat or gently concave in anterior portion, the internal ridges raised at base into a strongly projecting crest; external margins low; clypeal plate strongly exerted; submentum dentate; mandibles prominent, overlapping, strongly toothed. Scrobes curved, extending down towards lower margin of eye. Eyes ovate, finely faceted. Prothorax flattened above, hexagonal in outline, with a dentiform tubercle at middle of lateral margins; apex slightly produced, subtruncate above, ocular lobes well marked; surface granulate. Elytra oval, convex; humeral angles with upstanding crests; with two rows of tubercles and infra-humeral spine. Legs rather long and thin; tarsi comparatively slender, the posterior with basal joints elongate.

Genotype, *O. indutus* Pasc.

Oditesus forms one of a small group of genera characterised by the possession of prominent rostral crests or tubercles. In general habit it perhaps most closely resembles *Polyereta* and *Ennothus*, but is distinguished from these by the possession of ocular lobes. *Acherres* is distinguished by the peculiar shape of the prothorax, while the new genus described below is also differentiated on this structure.

The genus was described by Pascoe in 1872 for 6 species—*indutus*, *lycosarius*, *incoenis*, *perditus*, *sulcirostris* and *buceros*. I have examined the types of these and can only conclude that the first 4 names belong to but one variable species. The other two are more distinct, though it is still questionable whether they should be regarded as more than varietal forms.

Lea in 1903 described one species—*tibialis*—which, on account of the difference in the structure of the prothorax, I have thought advisable to remove to a new genus.

Oditesus appears to be restricted to the south-western portion of the continent, the range extending from King George Sound to Geraldton.

Table of Species.

- 1 (4) Size small; interstices tuberculate.
- 2 (3) Rostral crests large, more or less completely conjoined *O. indutus* Pasc.
- 3 (2) Rostral crests small, separate. *O. sulcirostris* Pasc.
- 4 (1) Size larger; interstices at least partially costate. *O. buceros* Pasc.

ODITESUS INDUTUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 88, t. 1, fig. 6.—*O. incoenis* Pasc., *loc. cit.*, p. 89.—*O. lycosarius* Pasc., *loc. cit.*, p. 89.—*O. perditus* Pasc., *loc. cit.*, p. 89.

Small, ovate. Black, moderately densely clothed with minute subsquamosity, varying in colour from grey to brown (obscured by dirt in type of *O. indutus*), sometimes appearing darker and with metallic copper reflections.

Head broad, gently transversely concave, with somewhat raised supraocular borders. Rostrum comparatively narrow, hardly excavate in front; basal crests large, erect, conical, conjoined at base, otherwise separated by a deep fissure, the apices divergent, this fissure extending anteriorly as a slight longitudinal impression. Prothorax flat disc-like above, with a shallow median sulcus; sub-apical impression broad though somewhat ill-defined; anterior margin slightly produced, with 4 small dentiform projections; lateral margins with a short spine in front of middle and smaller ones anterior and posterior to it; disc with small granules, with one or two rather larger granules on either side of median line;

sides granulate. Elytra granulate between the lines of tubercles; with two rows of spiniform tubercles; first row with a forward projecting tubercle at base of interstice, and with 4 spiniform tubercles, the last situated half way down declivity, the penultimate the largest; second row with a strong obliquely set humeral crest, quadridentate, and 3 acute spiniform tubercles, the last almost on the same posterior level as the last of first row; infra-humeral tubercle present, large, acute. Sides with interstices granulate. Under surface with scattered punctures, larger on metasternum and basal segments, apical segment with a rather feeble apical impression. *Dimensions*: 7.5 x 3.5 mm.

Hab.—Western Australia: King George Sound, Mt. Barker.

The above description was taken from the type, which is apparently a male, in the British Museum.

I was able to compare critically the types of Pascoe's four species as well as the fine series in the British Museum, and although slight variations exist in the actual shape and in the degree of separation of the rostral crests, I cannot regard them as belonging to more than one species. *O. lycosarius* and *O. perditus* have the crests larger than in *O. indutus* and *O. perditus*, but examination of the series shows that the shape of the crest is too variable to be regarded as of specific value.

Though I have maintained *O. sulcirostris* and *O. buceros* as distinct, I think it is possible that they too should be regarded as varieties of the same species.

ODITESUS SULCIROSTRIS Pasce.

Pascoe, Ann. Mag. Nat. Hist., 1872, p. 90.

♀. Head and rostrum much as in *O. indutus*, but rostral crests much smaller, and almost completely separated from each other. Prothorax with spinules on lateral margins less distinct, with the exception of the median lateral spine. Elytra ovate, with third interstice raised into a low ridge uniting the tubercles which are much less developed and, except the last, not conical; fifth interstice with humeral crest followed by 3 small obtuse projections; infra-humeral spine present. Under surface convex. *Dimensions*: ♀. 7 x 3.5 mm.

Hab.—Western Australia: Nicoll Bay, Champion Bay.

The Champion Bay specimens have the rostral crests equally small, but less completely separated, while the elytral tubercles are well developed as in *O. indutus*. I am inclined to regard the short crests as a specific difference, and the elytral sculpture as variable, possibly a sexual feature. Among the series of *O. indutus* in the British Museum is a female with the elytral sculpture as in the type of *O. sulcirostris*.

ODITESUS BUCEROS Pasce.

Pascoe, Ann. Mag. Nat. Hist., 1872, p. 90.

♀. Differs from *O. indutus* in being distinctly larger.

Head much as in *O. indutus*; rostrum with crests large and broad, completely joined except at extreme apex. Prothorax similar but rather more evenly granulate. Elytra not granulate, with more evident punctures; third interstice raised, costiform from base practically to apex with only a slight projection corresponding in position to the third tubercle in *O. indutus*; fifth interstice with large humeral crest followed by three isolated obtuse tubercles; infra-humeral spine present. Under surface convex, with scattered punctures. *Dimensions*: ♀. 10 x 4.5 mm.

sides granulate. Elytra granulate between the lines of tubercles; with two rows of spiniform tubercles; first row with a forward projecting tubercle at base of interstice, and with 4 spiniform tubercles, the last situated half way down declivity, the penultimate the largest; second row with a strong obliquely set humeral crest, quadridentate, and 3 acute spiniform tubercles, the last almost on the same posterior level as the last of first row; infra-humeral tubercle present, large, acute. Sides with interstices granulate. Under surface with scattered punctures, larger on metasternum and basal segments, apical segment with a rather feeble apical impression. *Dimensions*: 7.5 x 3.5 mm.

Hab.—Western Australia: King George Sound, Mt. Barker.

The above description was taken from the type, which is apparently a male, in the British Museum.

I was able to compare critically the types of Pascoe's four species as well as the fine series in the British Museum, and although slight variations exist in the actual shape and in the degree of separation of the rostral crests, I cannot regard them as belonging to more than one species. *O. lycosarius* and *O. perditus* have the crests larger than in *O. indutus* and *O. perditus*, but examination of the series shows that the shape of the crest is too variable to be regarded as of specific value.

Though I have maintained *O. sulcirostris* and *O. buceros* as distinct, I think it is possible that they too should be regarded as varieties of the same species.

ODITESUS SULCIROSTRIS Pasce.

Pascoe, Ann. Mag. Nat. Hist., 1872, p. 90.

♀. Head and rostrum much as in *O. indutus*, but rostral crests much smaller, and almost completely separated from each other. Prothorax with spinules on lateral margins less distinct, with the exception of the median lateral spine. Elytra ovate, with third interstice raised into a low ridge uniting the tubercles which are much less developed and, except the last, not conical; fifth interstice with humeral crest followed by 3 small obtuse projections; infra-humeral spine present. Under surface convex. *Dimensions*: ♀. 7 x 3.5 mm.

Hab.—Western Australia: Nicoll Bay, Champion Bay.

The Champion Bay specimens have the rostral crests equally small, but less completely separated, while the elytral tubercles are well developed as in *O. indutus*. I am inclined to regard the short crests as a specific difference, and the elytral sculpture as variable, possibly a sexual feature. Among the series of *O. indutus* in the British Museum is a female with the elytral sculpture as in the type of *O. sulcirostris*.

ODITESUS BUCEROS Pasce.

Pascoe, Ann. Mag. Nat. Hist., 1872, p. 90.

♀. Differs from *O. indutus* in being distinctly larger.

Head much as in *O. indutus*; rostrum with crests large and broad, completely joined except at extreme apex. Prothorax similar but rather more evenly granulate. Elytra not granulate, with more evident punctures; third interstice raised, costiform from base practically to apex with only a slight projection corresponding in position to the third tubercle in *O. indutus*; fifth interstice with large humeral crest followed by three isolated obtuse tubercles; infra-humeral spine present. Under surface convex, with scattered punctures. *Dimensions*: ♀. 10 x 4.5 mm.

Hab.—Western Australia: King George Sound.

A second specimen differs from the type in having the crests more separated, and in having indications of the tubercles on the third interstice, the apical tubercle being distinct. Apart from the larger size this species differs from *O. indutus* in the more massive crests, while the elytral sculpture if constant should afford a means of separation.

PARODITESUS, n. gen.

Size small. Head and rostrum as in *Oditesus*. Prothorax rounded on sides, apical margin slightly produced above, with well-marked ocular lobes; dorsum with median and sublateral longitudinal sulci; surface granulate. Elytra gradually widened posteriorly; subplanate above, with two rows of tubercles; humeral angles advanced, no infra-humeral spine. Legs similar, tarsi rather shorter.

Genotype, *Oditesus tibialis* Lea.

A new genus is necessary for the reception of *Oditesus tibialis* Lea. While closely agreeing with *Oditesus* in head and rostrum, the new genus differs both in the prothoracic and elytral sculpture. The prothorax suggests an affinity with *Bubaris* or *Aedriodes*, while the elytra is more reminiscent of *Melanegis* or *Sosytelus*.

PARODITESUS TIBIALIS Lea.

Oditesus tibialis Lea, Trans. Roy. Soc. S. Aust., xxvii., 1903, p. 114.

The peculiar structure of the anterior tibiae, from which the species derives its name is present in both sexes, though more marked in the male.

A female from Swan River in Mr. Lea's collection differs from other specimens before me in the less development of the elytral tubercles which are little more than mere undulations.

Hab.—Western Australia: Mt. Barker, King George Sound, Swan River.

POLYCRETA.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 8.

Small, narrow, elliptical. Head convex, with markedly prominent eyes, the latter rotundate and finely faceted. Rostrum comparatively long and narrow, the dorsal surface about one-half the total width; internal ridges raised at base in a pair of short tubercles; clypeal plate exerted; mandibles unusually long obtusely pointed, and dentate, submentum dentate in middle. Scrobes widely open posteriorly. Antennae long. Prothorax tuberculate-dentate on sides; apical margin produced above, without ocular lobes; disc flattened, spinulose. Elytra oval, convex from side to side, with three rows of spiniform tubercles, and infra-humeral spine. Legs moderately long, posterior tarsi elongate.

Genotype, *P. metrica* Pascoe.

Though placed by Pascoe among the long-scaped *Amycterinae* and allied to *Hyborrhynchus*, the present genus appears to me to have more affinity with the *Euomides* and is indeed very closely related to *Ennothus*. The relationship of these two genera would appear to be with the small group of genera allied to *Oditesus*.

POLYCRETA METRICA Pasce.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 8, t. 2, fig. 2.

♂. Elongate ovate, small, spinose. Black; densely covered with dark brown clothing, head, the middle line of prothorax, a band across summit of declivity

Hab.—Western Australia: King George Sound.

A second specimen differs from the type in having the crests more separated, and in having indications of the tubercles on the third interstice, the apical tubercle being distinct. Apart from the larger size this species differs from *O. indutus* in the more massive crests, while the elytral sculpture if constant should afford a means of separation.

PARODITESUS, n. gen.

Size small. Head and rostrum as in *Oditesus*. Prothorax rounded on sides, apical margin slightly produced above, with well-marked ocular lobes; dorsum with median and sublateral longitudinal sulci; surface granulate. Elytra gradually widened posteriorly; subplanate above, with two rows of tubercles; humeral angles advanced, no infra-humeral spine. Legs similar, tarsi rather shorter.

Genotype, *Oditesus tibialis* Lea.

A new genus is necessary for the reception of *Oditesus tibialis* Lea. While closely agreeing with *Oditesus* in head and rostrum, the new genus differs both in the prothoracic and elytral sculpture. The prothorax suggests an affinity with *Bubaris* or *Aedriodes*, while the elytra is more reminiscent of *Melanegis* or *Sosytelus*.

PARODITESUS TIBIALIS Lea.

Oditesus tibialis Lea, Trans. Roy. Soc. S. Aust., xxvii., 1903, p. 114.

The peculiar structure of the anterior tibiae, from which the species derives its name is present in both sexes, though more marked in the male.

A female from Swan River in Mr. Lea's collection differs from other specimens before me in the less development of the elytral tubercles which are little more than mere undulations.

Hab.—Western Australia: Mt. Barker, King George Sound, Swan River.

POLYCRETA.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 8.

Small, narrow, elliptical. Head convex, with markedly prominent eyes, the latter rotundate and finely faceted. Rostrum comparatively long and narrow, the dorsal surface about one-half the total width; internal ridges raised at base in a pair of short tubercles; clypeal plate exerted; mandibles unusually long obtusely pointed, and dentate, submentum dentate in middle. Scrobes widely open posteriorly. Antennae long. Prothorax tuberculate-dentate on sides; apical margin produced above, without ocular lobes; disc flattened, spinulose. Elytra oval, convex from side to side, with three rows of spiniform tubercles, and infra-humeral spine. Legs moderately long, posterior tarsi elongate.

Genotype, *P. metrica* Pascoe.

Though placed by Pascoe among the long-scaped *Amycterinae* and allied to *Hyborrhynchus*, the present genus appears to me to have more affinity with the *Euomides* and is indeed very closely related to *Ennothus*. The relationship of these two genera would appear to be with the small group of genera allied to *Oditesus*.

POLYCRETA METRICA Pasce.

Pascoe, Journ. Linn. Soc., xii., 1873, p. 8, t. 2, fig. 2.

♂. Elongate ovate, small, spinose. Black; densely covered with dark brown clothing, head, the middle line of prothorax, a band across summit of declivity

and sides of elytra with whitish clothing, median line of elytra tinged reddish brown.

Head flattened in front, ocular margins very slightly raised; eyes prominent, rather large, subrotundate, finely faceted. Rostrum moderately elongate and comparatively narrow, the width of upper surface much narrower than total width of rostrum; upper surface slightly contracted in the middle, feebly impressed along median line, with a pair of raised triangular dentiform projections at base. Scape long, comparatively slender. Prothorax almost pentagonal in shape, sides angulate, spinose in middle, apical margin produced over head, ocular lobes absent; lateral margins with a moderately large, outwardly projecting spine in middle, with a small spicule in front and behind, apical angle truncate, each side with three erect spinules; disc flattened, without evident granules except one or two minute spinules about centre, on either side of the median line. Elytra suboval, the first, third and fifth interstices each with a row of small spiniform tubercles, on the first and third gradually increasing in size posteriorly, very small and subobsolete at base, each row ending in a small tubercle above the apical fascia and with a larger tubercle below fascia, these tubercles forming a transverse line across declivity; infra-humeral spine present, acutely produced. Under surface flattened, base slightly depressed. Legs with posterior tarsi moderately elongate. *Dimensions*: 3-3½ lin. (Pascoe).

Hab.—Western Australia: Champion Bay (Geraldton).

The above description was drawn up from the type in the British Museum. The species is well figured by Pascoe and cannot well be mistaken for any other known species.

ENNOTHUS.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 87.

Small, ovate. Head as in *Polycreta*, but slightly broader. Rostrum shorter, with dorsal surface broader, the internal ridges tuberculate at base. Eyes prominent, but less so than in *Polycreta*. Scape shorter. Prothorax tuberculate-dentate at the sides, the apical margin slightly produced, without ocular lobes; disc subplanate, granulate. Elytra ovate, broader than in *Polycreta*; base emarginate, humeral angles with a low crest not projecting forwards; disc granulate, with a few tubercles posteriorly, infra-humeral spine present. Posterior tarsi moderately elongate.

Genotype, *E. fallax* Pascoe.

The original generic description consists of a few points of difference between *Ennothus* and *Acherres*. The genus however is much more closely related to *Polycreta*, and I have grave doubts as to whether it should be maintained as distinct. The main differences are the shorter and broader rostrum, the shorter scape and some differences in the prothoracic and elytral sculpture. There is moreover an undescribed species in the British Museum which might with equal propriety be referred to either genus.

ENNOTHUS FALLAX Pascoe.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 87.

Elongate-ovate, small. Clothing discoloured apparently uniformly brown.

Head broad, flattened, with faint traces of two longitudinal ridges, supra-ocular margins feebly raised. Eyes prominent, subrotundate. Rostrum comparatively broader and shorter than in *Polycreta*, the width across the upper

and sides of elytra with whitish clothing, median line of elytra tinged reddish brown.

Head flattened in front, ocular margins very slightly raised; eyes prominent, rather large, subrotundate, finely faceted. Rostrum moderately elongate and comparatively narrow, the width of upper surface much narrower than total width of rostrum; upper surface slightly contracted in the middle, feebly impressed along median line, with a pair of raised triangular dentiform projections at base. Scape long, comparatively slender. Prothorax almost pentagonal in shape, sides angulate, spinose in middle, apical margin produced over head, ocular lobes absent; lateral margins with a moderately large, outwardly projecting spine in middle, with a small spicule in front and behind, apical angle truncate, each side with three erect spinules; disc flattened, without evident granules except one or two minute spinules about centre, on either side of the median line. Elytra suboval, the first, third and fifth interstices each with a row of small spiniform tubercles, on the first and third gradually increasing in size posteriorly, very small and subobsolete at base, each row ending in a small tubercle above the apical fascia and with a larger tubercle below fascia, these tubercles forming a transverse line across declivity; infra-humeral spine present, acutely produced. Under surface flattened, base slightly depressed. Legs with posterior tarsi moderately elongate. *Dimensions*: 3-3½ lin. (Pascoe).

Hab.—Western Australia: Champion Bay (Geraldton).

The above description was drawn up from the type in the British Museum. The species is well figured by Pascoe and cannot well be mistaken for any other known species.

ENNOTHUS.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 87.

Small, ovate. Head as in *Polycreta*, but slightly broader. Rostrum shorter, with dorsal surface broader, the internal ridges tuberculate at base. Eyes prominent, but less so than in *Polycreta*. Scape shorter. Prothorax tuberculate-dentate at the sides, the apical margin slightly produced, without ocular lobes; disc subplanate, granulate. Elytra ovate, broader than in *Polycreta*; base emarginate, humeral angles with a low crest not projecting forwards; disc granulate, with a few tubercles posteriorly, infra-humeral spine present. Posterior tarsi moderately elongate.

Genotype, *E. fallax* Pascoe.

The original generic description consists of a few points of difference between *Ennothus* and *Acherres*. The genus however is much more closely related to *Polycreta*, and I have grave doubts as to whether it should be maintained as distinct. The main differences are the shorter and broader rostrum, the shorter scape and some differences in the prothoracic and elytral sculpture. There is moreover an undescribed species in the British Museum which might with equal propriety be referred to either genus.

ENNOTHUS FALLAX Pascoe.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 87.

Elongate-ovate, small. Clothing discoloured apparently uniformly brown.

Head broad, flattened, with faint traces of two longitudinal ridges, supra-ocular margins feebly raised. Eyes prominent, subrotundate. Rostrum comparatively broader and shorter than in *Polycreta*, the width across the upper

surface nearly equal to the total width of rostrum; upper surface very lightly depressed in middle, with a small dentiform crest at each side of base, situated to the inner side of the lateral margins. Scape moderately long, comparatively slender, shorter than in *Polyereta*. Prothorax not greatly dilatate, apical margin hardly produced, ocular lobes absent; lateral margin with a small spicule posterior to middle and two smaller ones anterior to middle; median line hardly depressed, with a couple of small projections on each side near apex, and one about the middle, the rest of the surface apparently with a few obscure granules. Elytra suboval, strongly rounded on sides, base feebly emarginate, humeral angles not produced; disc with small obscure punctures, first interstices slightly raised, ending in a slight thickening, hardly a tubercle, at commencement of declivity; second with one or two granuliform tubercles above declivity; third with a row of small tubercles, granuliform at base, larger posteriorly, but always very small, the apical one at beginning of declivity; fifth with a humeral row of about 4 spicules forming a slight crest, thence with a row of small tubercles similar to those on third; infra-humeral tubercle spiculiform, followed by a row of small spiculiform granules. Under surface with base of abdomen gently convex; female genitalia extruded. Tarsi similar to *Polyereta*. *Dimensions*: 3 lines (Pascoe).

Hab.—Western Australia.

The above description was drawn up from the type in the British Museum. I am indebted to Mr. A. M. Lea for a specimen, which I compared with the type; it also is without locality label. Another specimen in Mr. Lea's collection from Bunbury probably belongs to this species, but is in a bad state of preservation.

ACHERRES.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 87.

Small, ovate. Head convex. Rostrum short, thick, slightly narrowed to base; upper surface with internal ridges strongly raised into a prominent crest overhanging each eye; external margins low; clypeal plate exerted, facing forwards; submental margin almost straight; scrobes feebly curved almost reaching eyes. Antennae short. Eyes subrotundate, finely faceted. Prothorax much narrower than elytra, rounded on sides; apical margin subtruncate above, without ocular lobes; upper surface strongly convex from side to side, set with relatively large umbilicate rounded granules. Elytra ovoid, greatly widened on the sides; base emarginate, humeral angles marked, but not greatly produced; interstices tuberculate or granulate. Ventral surface flattened. Legs moderately long; tarsal joints comparatively short, the posterior slightly longer.

Genotype, *A. mamillatus* Pascoe.

This genus in its rostral structure shows some relation to *Oditesus*, though the crests are different in shape; the form of the prothorax is however altogether different, and is indeed unlike any other genus in the group.

Acherres was formed in 1872 for a single species—*A. mamillatus*; Lea in 1903 described a second species—*globoicollis*, and in 1915 three species—*latus*, *pilosus* and *granulatus*—were added by myself. Of these *A. latus* may prove to be merely a large variety of *A. mamillatus*, but the others possess distinctive characters.

surface nearly equal to the total width of rostrum; upper surface very lightly depressed in middle, with a small dentiform crest at each side of base, situated to the inner side of the lateral margins. Scape moderately long, comparatively slender, shorter than in *Polyereta*. Prothorax not greatly dilatate, apical margin hardly produced, ocular lobes absent; lateral margin with a small spicule posterior to middle and two smaller ones anterior to middle; median line hardly depressed, with a couple of small projections on each side near apex, and one about the middle, the rest of the surface apparently with a few obscure granules. Elytra suboval, strongly rounded on sides, base feebly emarginate, humeral angles not produced; disc with small obscure punctures, first interstices slightly raised, ending in a slight thickening, hardly a tubercle, at commencement of declivity; second with one or two granuliform tubercles above declivity; third with a row of small tubercles, granuliform at base, larger posteriorly, but always very small, the apical one at beginning of declivity; fifth with a humeral row of about 4 spicules forming a slight crest, thence with a row of small tubercles similar to those on third; infra-humeral tubercle spiculiform, followed by a row of small spiculiform granules. Under surface with base of abdomen gently convex; female genitalia extruded. Tarsi similar to *Polyereta*. *Dimensions*: 3 lines (Pascoe).

Hab.—Western Australia.

The above description was drawn up from the type in the British Museum. I am indebted to Mr. A. M. Lea for a specimen, which I compared with the type; it also is without locality label. Another specimen in Mr. Lea's collection from Bunbury probably belongs to this species, but is in a bad state of preservation.

ACHERRES.

Pascoe, Ann. Nat. Hist., (4), x., 1872, p. 87.

Small, ovate. Head convex. Rostrum short, thick, slightly narrowed to base; upper surface with internal ridges strongly raised into a prominent crest overhanging each eye; external margins low; clypeal plate exerted, facing forwards; submental margin almost straight; scrobes feebly curved almost reaching eyes. Antennae short. Eyes subrotundate, finely faceted. Prothorax much narrower than elytra, rounded on sides; apical margin subtruncate above, without ocular lobes; upper surface strongly convex from side to side, set with relatively large umbilicate rounded granules. Elytra ovoid, greatly widened on the sides; base emarginate, humeral angles marked, but not greatly produced; interstices tuberculate or granulate. Ventral surface flattened. Legs moderately long; tarsal joints comparatively short, the posterior slightly longer.

Genotype, *A. mamillatus* Pascoe.

This genus in its rostral structure shows some relation to *Oditesus*, though the crests are different in shape; the form of the prothorax is however altogether different, and is indeed unlike any other genus in the group.

Acherres was formed in 1872 for a single species—*A. mamillatus*; Lea in 1903 described a second species—*globoicollis*, and in 1915 three species—*latus*, *pilosus* and *granulatus*—were added by myself. Of these *A. latus* may prove to be merely a large variety of *A. mamillatus*, but the others possess distinctive characters.

Table of Species.

- 1 (6) Elytral interstices tuberculate.
- 2 (5) First and second interstices separate at base.
- 3 (4) Smaller species with tubercles conical. *A. mamillatus* Pasc.
- 4 (3) Larger broader species, with tubercles more debased. *A. latus* Ferg.
- 5 (2) First and third interstices conjoined at base. *A. globicollis* Lea.
- 6 (1) Elytral interstices granulate.
- 7 (8) Setae short. *A. granulatus* Ferg.
- 8 (7) Setae long, piliform. *A. pilosus* Ferg.

ACHERRES MAMILLATUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 87, t. 1, fig. 5.

Small, ovate. Black; practically destitute of clothing; setae short, black.

Head strongly convex, separated from rostrum by a deep transverse sulcus. Rostrum as wide as head at apex, narrower at base; upper surface rising at base into two conspicuous divergent crests, overhanging the eyes, with moderately large punctures. Scrobes little curved, extending almost to eyes. Eyes rotundate. Scape moderately long and thick; funicle with all the joints short. Prothorax narrow, hardly rounded, almost parallel-sided; apex not produced above, without ocular lobes; disc strongly convex antero-posteriorly and from side to side; median line impressed; closely set with large mamillate, umbilicate granules. Sides with similar granules. Elytra strongly ovate, much wider than prothorax, base emarginate with moderately advanced humeral angles; disc somewhat depressed, with rows of moderately large punctures and rows of umbilicate granules or tubercles; first interstice not joining third at base, with a single row of rather depressed, umbilicate, granules, obsolete posteriorly; second interstice with one or two similar granules; third interstice with a row of about 8 elevations, at base composed of groups of two or three umbilicate granules, becoming larger posteriorly and the last 2-3 tuberculiform, multipunctate, the last much the largest, overhanging declivity; fifth interstice with 6-7 smaller, almost spiniform, tubercles, larger posteriorly, multipunctate; seventh interstice with a single acute infra-humeral tubercle. Sides with deep foveiform punctures. Ventral surface hardly convex, without punctures; apical segment with a raised hirsute prominence. Legs simple; tarsi comparatively short. *Dimensions*: 9 x 5 mm.

Hab.—Western Australia: Geraldton.

The sex distinctions in this genus are not well marked and short of dissecting a specimen it is difficult to be sure whether it is male or female.

The species is close to *A. latus* Ferg., but as a rule smaller with somewhat different tubercles.

ACHERRES LATUS Ferg.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 83.

This should perhaps be considered as a variety of *A. mamillatus* Pasc., rather than as a distinct species.

Hab.—Western Australia: Cue, Lake Austin.

ACHERRES GLOBICOLLIS Lea.

Lea, Trans. Roy. Soc. S. Aust., xxvii., 1903, p. 114.

This species may be readily distinguished from the other members of the genus by the fact that the first and third interstices are conjoined at the base. The elytral tubercles appear subject to a considerable degree of variation in their size and development.

Hab.—Western Australia: Swan River, Perth, Jandakot.

Table of Species.

- 1 (6) Elytral interstices tuberculate.
- 2 (5) First and second interstices separate at base.
- 3 (4) Smaller species with tubercles conical. *A. mamillatus* Pasc.
- 4 (3) Larger broader species, with tubercles more debased. *A. latus* Ferg.
- 5 (2) First and third interstices conjoined at base. *A. globicollis* Lea.
- 6 (1) Elytral interstices granulate.
- 7 (8) Setae short. *A. granulatus* Ferg.
- 8 (7) Setae long, piliform. *A. pilosus* Ferg.

ACHERRES MAMILLATUS Pasc.

Pascoe, Ann. Nat. Hist., 1872, p. 87, t. 1, fig. 5.

Small, ovate. Black; practically destitute of clothing; setae short, black.

Head strongly convex, separated from rostrum by a deep transverse sulcus. Rostrum as wide as head at apex, narrower at base; upper surface rising at base into two conspicuous divergent crests, overhanging the eyes, with moderately large punctures. Scrobes little curved, extending almost to eyes. Eyes rotundate. Scape moderately long and thick; funicle with all the joints short. Prothorax narrow, hardly rounded, almost parallel-sided; apex not produced above, without ocular lobes; disc strongly convex antero-posteriorly and from side to side; median line impressed; closely set with large mamillate, umbilicate granules. Sides with similar granules. Elytra strongly ovate, much wider than prothorax, base emarginate with moderately advanced humeral angles; disc somewhat depressed, with rows of moderately large punctures and rows of umbilicate granules or tubercles; first interstice not joining third at base, with a single row of rather depressed, umbilicate, granules, obsolete posteriorly; second interstice with one or two similar granules; third interstice with a row of about 8 elevations, at base composed of groups of two or three umbilicate granules, becoming larger posteriorly and the last 2-3 tuberculiform, multipunctate, the last much the largest, overhanging declivity; fifth interstice with 6-7 smaller, almost spiniform, tubercles, larger posteriorly, multipunctate; seventh interstice with a single acute infra-humeral tubercle. Sides with deep foveiform punctures. Ventral surface hardly convex, without punctures; apical segment with a raised hirsute prominence. Legs simple; tarsi comparatively short. *Dimensions*: 9 x 5 mm.

Hab.—Western Australia: Geraldton.

The sex distinctions in this genus are not well marked and short of dissecting a specimen it is difficult to be sure whether it is male or female.

The species is close to *A. latus* Ferg., but as a rule smaller with somewhat different tubercles.

ACHERRES LATUS Ferg.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 83.

This should perhaps be considered as a variety of *A. mamillatus* Pasc., rather than as a distinct species.

Hab.—Western Australia: Cue, Lake Austin.

ACHERRES GLOBICOLLIS Lea.

Lea, Trans. Roy. Soc. S. Aust., xxvii., 1903, p. 114.

This species may be readily distinguished from the other members of the genus by the fact that the first and third interstices are conjoined at the base. The elytral tubercles appear subject to a considerable degree of variation in their size and development.

Hab.—Western Australia: Swan River, Perth, Jandakot.

ACHERRES GRANULATUS Ferg.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 84.

Hab.—South Australia: Tareoola.

ACHERRES PILOSUS Ferg.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 84.

Hab.—Western Australia: Cue.

These two species are distinguished from the other members of the genus by the absence of elytral tubercles. They may be separated *inter se* by the nature of the setae, and by the differences in the elytral granules.

AMORPHORHINUS.

Lacordaire, Gen. Coleopt., vi., 1863, p. 318.

Small, oblongate. Head depressed in front, with well-marked supra-ocular tubercles. Rostrum short and broad; upper surface depressed in middle with raised internal ridges, the lateral margins well marked, somewhat divergent at base; clypeal plate exerted, facing downward and forwards; submentum, almost straight; scrobes strongly curved, almost reaching eyes. Antennae short, scape short, funicular joints short. Eyes ovate finely faceted. Prothorax angulo-tuberculate on sides; apical margin hardly produced above, with strong ocular lobes; pronotum with median area depressed, bounded on each side by a well-marked ridge, with a sublateral ridge on anterior half between admedian ridge and lateral angle; sides more or less granulate. Prosternum rather strongly concave with a distinct tubercle on each side (except in *A. rugicollis*). Elytra more or less parallel sided or slightly widened posteriorly, the sides suddenly narrowed before apex; base deeply emarginate, the humeral angles strongly produced and cristaform; disc with third and fifth interstices tuberculate or subcostate. Ventral surface flattened in ♂, convex in ♀. Legs comparatively short, the posterior tarsal joints more elongate than the others.

Genotype, *Brachycerus australis* Germar.

The affinities of this rather remarkable genus are not very obvious; in the structure of the rostrum some relation to *Euomus* is suggested, but the clypeal plate is more strongly exerted and in other respects, e.g., the supraorbital crests, form of prothorax and elytra and general shape, it differs widely from that genus. At the same time it does not appear allied to any other known genus of the group.

Lacordaire laid stress on the excavation of the prosternum in separating the genus, but in one species (*rugicollis* Lea, originally described as a *Sosytelus*) the prosternum is not at all concave, though in other respects this species does not seem separable from the genus.

Some of the species are variable in structure and it is uncertain how far variation should be held to extend particularly in cases where forms in different localities are constant in each locality but differ from those of another. In some of these instances in the present paper I have thought it wise to attach specific or subspecific names to the different forms. More information is however required about the Western Australian species which show marked variation in structure.

Amorphorhinus was erected by Lacordaire in 1863 for the reception of

ACHERRES GRANULATUS Ferg.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 84.

Hab.—South Australia: Tareoola.

ACHERRES PILOSUS Ferg.

Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 84.

Hab.—Western Australia: Cue.

These two species are distinguished from the other members of the genus by the absence of elytral tubercles. They may be separated *inter se* by the nature of the setae, and by the differences in the elytral granules.

AMORPHORHINUS.

Lacordaire, Gen. Coleopt., vi., 1863, p. 318.

Small, oblongate. Head depressed in front, with well-marked supra-ocular tubercles. Rostrum short and broad; upper surface depressed in middle with raised internal ridges, the lateral margins well marked, somewhat divergent at base; clypeal plate exerted, facing downward and forwards; submentum, almost straight; scrobes strongly curved, almost reaching eyes. Antennae short, scape short, funicular joints short. Eyes ovate finely faceted. Prothorax angulo-tuberculate on sides; apical margin hardly produced above, with strong ocular lobes; pronotum with median area depressed, bounded on each side by a well-marked ridge, with a sublateral ridge on anterior half between admedian ridge and lateral angle; sides more or less granulate. Prosternum rather strongly concave with a distinct tubercle on each side (except in *A. rugicollis*). Elytra more or less parallel sided or slightly widened posteriorly, the sides suddenly narrowed before apex; base deeply emarginate, the humeral angles strongly produced and cristaform; disc with third and fifth interstices tuberculate or subcostate. Ventral surface flattened in ♂, convex in ♀. Legs comparatively short, the posterior tarsal joints more elongate than the others.

Genotype, *Brachycerus australis* Germar.

The affinities of this rather remarkable genus are not very obvious; in the structure of the rostrum some relation to *Euomus* is suggested, but the clypeal plate is more strongly exerted and in other respects, e.g., the supraorbital crests, form of prothorax and elytra and general shape, it differs widely from that genus. At the same time it does not appear allied to any other known genus of the group.

Lacordaire laid stress on the excavation of the prosternum in separating the genus, but in one species (*rugicollis* Lea, originally described as a *Sosytelus*) the prosternum is not at all concave, though in other respects this species does not seem separable from the genus.

Some of the species are variable in structure and it is uncertain how far variation should be held to extend particularly in cases where forms in different localities are constant in each locality but differ from those of another. In some of these instances in the present paper I have thought it wise to attach specific or subspecific names to the different forms. More information is however required about the Western Australian species which show marked variation in structure.

Amorphorhinus was erected by Lacordaire in 1863 for the reception of

Brachycerus australis Germar. Pascoe added a second species—*polyacanthus*—in 1870, and a third—*arcanus*—in 1882. In 1915 I described a species—*muriceus*—which I now regard as merely a variation of *A. polyacanthus* Pasce.

In 1895 Lea described a species of *Sosytelus*—*rugicollis*—which I here place in *Amorphorhinus*. Names are also attached to two forms which might be regarded as distinct species or as geographical races of *A. australis* Germar.

Table of Species.

- | | | | |
|----|------|---|--------------------------------|
| 1 | (8) | Infra-humeral tubercle absent. | |
| 2 | (7) | Third and fifth interstices tuberculate. | |
| 3 | (6) | Elytral tubercles erect, subconical. | |
| 4 | (5) | Large species, with basal tubercles on third interstice confluent to form a distinct ridge. | <i>A. tuberculatus</i> , n.sp. |
| 5 | (4) | Smaller species, with basal tubercles somewhat irregularly placed, but not confluent. | <i>A. australis</i> Germ. |
| 6 | (3) | Elytral tubercles obtusely rounded, less conspicuous. | <i>A. obliterated</i> , n.sp. |
| 7 | (2) | Third and fifth elytral interstices subcostate. | <i>A. rugicollis</i> Lea. |
| 8 | (1) | Infra-humeral tubercle present. | |
| 9 | (10) | Elytral interstices tuberculate. | <i>A. polyacanthus</i> Pasce. |
| 10 | (9) | Elytral interstices granulate, the third interstice subfasciculate. | <i>A. arcanus</i> Pasce. |

AMORPHORHINUS AUSTRALIS Germ.

Brachycerus australis, Germar, Linn. Ent., iii., 1848, p. 209.—*Amorphorhinus id.*, Lacordaire, Gen. Coleop. Atlas, vii., t. 67, fig. 6a-b.

Small, oblongate. Black, more or less densely clothed with greyish brown subpubescence.

Head convex, forehead flattened, with several irregular longitudinal ridges, not conspicuous and variable; supraocular crests present, large. Rostrum short, with the upper surface depressed in the basal half; internal ridges short, elevated, strongly convergent; external margins depressed at base. Scape very short, funicular joints short, the first slightly longer than the others. Eyes finely faceted. Prothorax strongly convex, the lateral margins strongly tuberculate-angulate in the middle; apex subtruncate above, with well marked postocular lobes; upper surface subplanate, with rather broad and somewhat irregular median and sublateral longitudinal impressions; the median area widest in the middle, bounded on each side by a raised ridge, set with small semi-confluent umbilicate granules; a similar ridge situated between the sublateral impression and the lateral margin in the apical half only. Elytra suboblongate, very gently rounded on the sides; apex abruptly rounded; base deeply emarginate, with strongly advanced, somewhat inverted humeral angles, the bases of the third interstices advanced to a less extent and also inverted; disc with rows of rather deep, moderately regular rounded punctures; third and fifth interstices raised and tuberculate, the third incurved at base and towards declivity, with a row of small nodulose tubercles, smaller at base, longer posteriorly, ending at edge of declivity, the penultimate tubercle the largest; fifth interstice with a row of about 9 small tubercles extending along the outer side of the humeral crest and along the interstice to end in a much larger tubercle at level of declivity; lateral interstices non-granulate, infra-humeral tubercle absent. Prosternum widely concave in centre, with a small tubercle on each side. Ventral segments more or less flattened. *Dimensions*: ♂. 8.9 x 4 mm.

Hab.—South Australia: Ardrossan; Queensland: Mackay.

Brachycerus australis Germar. Pascoe added a second species—*polyacanthus*—in 1870, and a third—*arcanus*—in 1882. In 1915 I described a species—*muriceus*—which I now regard as merely a variation of *A. polyacanthus* Pasce.

In 1895 Lea described a species of *Sosytelus*—*rugicollis*—which I here place in *Amorphorhinus*. Names are also attached to two forms which might be regarded as distinct species or as geographical races of *A. australis* Germar.

Table of Species.

- | | | | |
|----|------|---|--------------------------------|
| 1 | (8) | Infra-humeral tubercle absent. | |
| 2 | (7) | Third and fifth interstices tuberculate. | |
| 3 | (6) | Elytral tubercles erect, subconical. | |
| 4 | (5) | Large species, with basal tubercles on third interstice confluent to form a distinct ridge. | <i>A. tuberculatus</i> , n.sp. |
| 5 | (4) | Smaller species, with basal tubercles somewhat irregularly placed, but not confluent. | <i>A. australis</i> Germ. |
| 6 | (3) | Elytral tubercles obtusely rounded, less conspicuous. | <i>A. obliterated</i> , n.sp. |
| 7 | (2) | Third and fifth elytral interstices subcostate. | <i>A. rugicollis</i> Lea. |
| 8 | (1) | Infra-humeral tubercle present. | |
| 9 | (10) | Elytral interstices tuberculate. | <i>A. polyacanthus</i> Pasce. |
| 10 | (9) | Elytral interstices granulate, the third interstice subfasciculate. | <i>A. arcanus</i> Pasce. |

AMORPHORHINUS AUSTRALIS Germ.

Brachycerus australis, Germar, Linn. Ent., iii., 1848, p. 209.—*Amorphorhinus id.*, Lacordaire, Gen. Coleop. Atlas, vii., t. 67, fig. 6a-b.

Small, oblongate. Black, more or less densely clothed with greyish brown subpubescence.

Head convex, forehead flattened, with several irregular longitudinal ridges, not conspicuous and variable; supraocular crests present, large. Rostrum short, with the upper surface depressed in the basal half; internal ridges short, elevated, strongly convergent; external margins depressed at base. Scape very short, funicular joints short, the first slightly longer than the others. Eyes finely faceted. Prothorax strongly convex, the lateral margins strongly tuberculate-angulate in the middle; apex subtruncate above, with well marked postocular lobes; upper surface subplanate, with rather broad and somewhat irregular median and sublateral longitudinal impressions; the median area widest in the middle, bounded on each side by a raised ridge, set with small semi-confluent umbilicate granules; a similar ridge situated between the sublateral impression and the lateral margin in the apical half only. Elytra suboblongate, very gently rounded on the sides; apex abruptly rounded; base deeply emarginate, with strongly advanced, somewhat inverted humeral angles, the bases of the third interstices advanced to a less extent and also inverted; disc with rows of rather deep, moderately regular rounded punctures; third and fifth interstices raised and tuberculate, the third incurved at base and towards declivity, with a row of small nodulose tubercles, smaller at base, longer posteriorly, ending at edge of declivity, the penultimate tubercle the largest; fifth interstice with a row of about 9 small tubercles extending along the outer side of the humeral crest and along the interstice to end in a much larger tubercle at level of declivity; lateral interstices non-granulate, infra-humeral tubercle absent. Prosternum widely concave in centre, with a small tubercle on each side. Ventral segments more or less flattened. *Dimensions*: ♂. 8.9 x 4 mm.

Hab.—South Australia: Ardrossan; Queensland: Mackay.

I have identified the above with *A. australis* as of the two forms which occur in South Australia, this one agrees best with Germar's description.

The name *A. australis* is however commonly employed to cover all the eastern forms of *Amorphorhinus* except *rugicollis* Lea. It was recognised that the species was variable but the material available indicates that the name has been used to cover either several distinct species or else geographical races. I have however only specimens from widely distant localities, and these appear sufficiently distinct to describe. Specimens are however required from intervening districts in order to ascertain whether there are any intergrading forms. It is noteworthy that specimens in Mr. Lea's collection labelled as from Mackay, Queensland, are indistinguishable from the typical South Australian form. I am uncertain of the range in the latter State, as Ardrossan and Lucindale are the only localities definitely fixed for the species, other specimens that I have seen being merely labelled South Australia; in the eastern portion of the State however the next species (or subspecies) occurs. In the Australian Museum there are a number of specimens of this species brought back by Mitchell's Expedition to the Victoria River.

AMORPHORHINUS TUBERCULATUS, n.sp.

Similar to *A. australis* Germ., but larger with stronger tubercles. Black; with somewhat sparse brown subsetose clothing.

Head and rostrum similar to *A. australis*; but ridges and supraocular crests more marked. Prothorax with ridges more elevated and granules larger. Elytra with humeral crests projecting much more strongly outwards and forwards; the free margin lined by a row of large granules or small tubercles; third interstee with a row of large erect subconical tubercles, pluripunctate, those at base fused to form a short oblique ridge, directed inwards and forwards; fifth interstee with a row of 4-6 strong conical tubercles from behind humeral crest to declivity, the last much larger and obtuse. Legs and ventral surface as in *A. australis*. *Dimensions*: 10-11 x 5 mm.

Hab.—South Australia: Marama, Karoonda.

Three specimens are before me, all apparently females; the chief differences from *A. australis* lie in the larger size and the greater development of all the structural characters. It is probably an eastern form of *A. australis*, but my records of the range of that species are very incomplete.

AMORPHORHINUS OBLITERATUS, n.sp. or subsp.

Larger than *A. australis*, but with less well defined tubercles. Black; rather densely clothed with brown subsquamose pubescence.

Head similar, but more irregularly and rugosely ridged; rostrum as in *A. australis*. Prothorax with lateral angles more obtuse, not acutely tuberculate; ridges on disc lower, broader, with granules almost completely fused. Elytra with humeral angles advanced but not projecting laterally, hardly interrupting the line of the lateral margin; third interstee raised, in the form of a somewhat tortuous ridge in the basal half, followed by 3 isolated, obtuse, nodulose tubercles; fifth interstee with a row of obtuse granules along outer border of humeral crests, continued on as a row of small obtuse tubercles, of which 4-5 are distinct and the remainder fused to form an elongate tubercle corresponding in position to the large tubercle in *A. australis* and one or two of those immediately before it. Other structures as in *A. australis*. *Dimensions*: 10 x 4.5 mm.

I have identified the above with *A. australis* as of the two forms which occur in South Australia, this one agrees best with Germar's description.

The name *A. australis* is however commonly employed to cover all the eastern forms of *Amorphorhinus* except *rugicollis* Lea. It was recognised that the species was variable but the material available indicates that the name has been used to cover either several distinct species or else geographical races. I have however only specimens from widely distant localities, and these appear sufficiently distinct to describe. Specimens are however required from intervening districts in order to ascertain whether there are any intergrading forms. It is noteworthy that specimens in Mr. Lea's collection labelled as from Mackay, Queensland, are indistinguishable from the typical South Australian form. I am uncertain of the range in the latter State, as Ardrossan and Lucindale are the only localities definitely fixed for the species, other specimens that I have seen being merely labelled South Australia; in the eastern portion of the State however the next species (or subspecies) occurs. In the Australian Museum there are a number of specimens of this species brought back by Mitchell's Expedition to the Victoria River.

AMORPHORHINUS TUBERCULATUS, n.sp.

Similar to *A. australis* Germ., but larger with stronger tubercles. Black; with somewhat sparse brown subsetose clothing.

Head and rostrum similar to *A. australis*; but ridges and supraocular crests more marked. Prothorax with ridges more elevated and granules larger. Elytra with humeral crests projecting much more strongly outwards and forwards; the free margin lined by a row of large granules or small tubercles; third interstee with a row of large erect subconical tubercles, pluripunctate, those at base fused to form a short oblique ridge, directed inwards and forwards; fifth interstee with a row of 4-6 strong conical tubercles from behind humeral crest to declivity, the last much larger and obtuse. Legs and ventral surface as in *A. australis*. *Dimensions*: 10-11 x 5 mm.

Hab.—South Australia: Marama, Karoonda.

Three specimens are before me, all apparently females; the chief differences from *A. australis* lie in the larger size and the greater development of all the structural characters. It is probably an eastern form of *A. australis*, but my records of the range of that species are very incomplete.

AMORPHORHINUS OBLITERATUS, n.sp. or subsp.

Larger than *A. australis*, but with less well defined tubercles. Black; rather densely clothed with brown subsquamose pubescence.

Head similar, but more irregularly and rugosely ridged; rostrum as in *A. australis*. Prothorax with lateral angles more obtuse, not acutely tuberculate; ridges on disc lower, broader, with granules almost completely fused. Elytra with humeral angles advanced but not projecting laterally, hardly interrupting the line of the lateral margin; third interstee raised, in the form of a somewhat tortuous ridge in the basal half, followed by 3 isolated, obtuse, nodulose tubercles; fifth interstee with a row of obtuse granules along outer border of humeral crests, continued on as a row of small obtuse tubercles, of which 4-5 are distinct and the remainder fused to form an elongate tubercle corresponding in position to the large tubercle in *A. australis* and one or two of those immediately before it. Other structures as in *A. australis*. *Dimensions*: 10 x 4.5 mm.

Hab.—N.S. Wales: Muswellbrook.

Differs from *A. australis* in the less developed, more obtuse tubercles; the structure of the third interstice being much confused and difficult to describe. Two specimens are now before me, but I have seen others from the same locality.

Two specimens from Bell in South-eastern Queensland differ somewhat from the above description in that while the same tendency to fusion exists, the structures are better defined and the individual tubercles rather larger though obtuse.

AMORPHORHINUS POLYACANTHUS Pasc.

Pascoe, Journ. Linn. Soc., xi., 1873, p. 454.—*A. muriceus* Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 85.

Since my description of *A. muriceus* was published I have had the opportunity of examining many more specimens, including the type of *A. polyacanthus* in the British Museum. I now consider that all these specimens should be referred to but one species—*polyacanthus*—which is extremely variable in the size and development of the elytral tubercles. The differences in clothing appear to be due to the abrasion or discolouration of specimens which are old or rubbed; fresh specimens irrespective of the development of the elytral tubercles are clothed as described under *muriceus*.

Hab.—Western Australia: Swan River District, Beverley, Darling Ranges.

AMORPHORHINUS ARCANUS Pasc.

Pascoe, Ann. Nat. Hist., (5), ix., 1882, p. 379.

Elongate ovate, small. Black; densely clothed with chocolate brown subpubescence in fresh specimens (type abraded and muddy).

Head convex, tri-impressed in front, with two longitudinal ridges and a somewhat obsolete projection, not conical nor conspicuous over eye. Rostrum short, broad, separated from head by a somewhat ill-defined impression; anterior portion of dorsal surface not raised, with a median ridge bifurcate anteriorly, the apical plate lying in the fork; basal half depressed in middle, with a ridge on either side, these ridges almost immediately bifurcated, the inner portion extending straight back to the ends of the ridges on the head, the outer ridge diverging outwards to meet the supraorbital crests; space between branches shallowly depressed, in each case the rostral ridges separated from the corresponding head ridges by a slight impression. Antennae with scape short, greatly incrassate at apex. Prothorax transverse; apical margin truncate above, with moderately prominent ocular lobes; lateral margins angulate in middle, with small granules extending from base outwards to angle and thence inwards to ocular lobes; disc with a rather irregular and ill-defined subapical impression, and a broad moderately deep median impression; somewhat unevenly set with somewhat depressed granules of moderate size; sides granulate. Elytra gradually widened, abruptly narrowed before apex; base deeply emarginate, humeral angles cristiform, projecting forwards; third interstice raised, slightly produced forwards at base, with a row of granules, small and closely placed at base, slightly larger and irregularly placed posteriorly, in unabraded specimens with 3-4 fasciculate elevations composed of upright setae and short stout subetose pubescence; fifth interstice with a row of granules along outer edge of humeral crest, also with granules along interstice, forming a distinct row on posterior portion, but somewhat confused and apparently in double series on middle of interstice; the pos-

Hab.—N.S. Wales: Muswellbrook.

Differs from *A. australis* in the less developed, more obtuse tubercles; the structure of the third interstice being much confused and difficult to describe. Two specimens are now before me, but I have seen others from the same locality.

Two specimens from Bell in South-eastern Queensland differ somewhat from the above description in that while the same tendency to fusion exists, the structures are better defined and the individual tubercles rather larger though obtuse.

AMORPHORHINUS POLYACANTHUS Pasc.

Pascoe, Journ. Linn. Soc., xi., 1873, p. 454.—*A. muriceus* Ferguson, Trans. Roy. Soc. S. Aust., xxxix., 1915, p. 85.

Since my description of *A. muriceus* was published I have had the opportunity of examining many more specimens, including the type of *A. polyacanthus* in the British Museum. I now consider that all these specimens should be referred to but one species—*polyacanthus*—which is extremely variable in the size and development of the elytral tubercles. The differences in clothing appear to be due to the abrasion or discolouration of specimens which are old or rubbed; fresh specimens irrespective of the development of the elytral tubercles are clothed as described under *muriceus*.

Hab.—Western Australia: Swan River District, Beverley, Darling Ranges.

AMORPHORHINUS ARCANUS Pasc.

Pascoe, Ann. Nat. Hist., (5), ix., 1882, p. 379.

Elongate ovate, small. Black; densely clothed with chocolate brown subpubescence in fresh specimens (type abraded and muddy).

Head convex, tri-impressed in front, with two longitudinal ridges and a somewhat obsolete projection, not conical nor conspicuous over eye. Rostrum short, broad, separated from head by a somewhat ill-defined impression; anterior portion of dorsal surface not raised, with a median ridge bifurcate anteriorly, the apical plate lying in the fork; basal half depressed in middle, with a ridge on either side, these ridges almost immediately bifurcated, the inner portion extending straight back to the ends of the ridges on the head, the outer ridge diverging outwards to meet the supraorbital crests; space between branches shallowly depressed, in each case the rostral ridges separated from the corresponding head ridges by a slight impression. Antennae with scape short, greatly incrassate at apex. Prothorax transverse; apical margin truncate above, with moderately prominent ocular lobes; lateral margins angulate in middle, with small granules extending from base outwards to angle and thence inwards to ocular lobes; disc with a rather irregular and ill-defined subapical impression, and a broad moderately deep median impression; somewhat unevenly set with somewhat depressed granules of moderate size; sides granulate. Elytra gradually widened, abruptly narrowed before apex; base deeply emarginate, humeral angles cristaform, projecting forwards; third interstice raised, slightly produced forwards at base, with a row of granules, small and closely placed at base, slightly larger and irregularly placed posteriorly, in unabraded specimens with 3-4 fasciculate elevations composed of upright setae and short stout subetose pubescence; fifth interstice with a row of granules along outer edge of humeral crest, also with granules along interstice, forming a distinct row on posterior portion, but somewhat confused and apparently in double series on middle of interstice; the pos-

terior ends of both third and fifth interstices incurved; seventh interstice with prominent infra-humeral tubercle, the outer margin set with three or four granules. Sides with rows of small punctures; interstices non-granulate. Under surface slightly convex at base; moderately densely clothed with yellowish-brown pubescence; punctures small, obscured in type, slightly on apical segment. Propectus with a slight nodule in front of anterior coxae, gently concave between. *Dimensions*: 8.5 x 4 mm.

Hab.—Western Australia: Swan River.

Of this species I have examined the type and another specimen in the British Museum. The species is allied to *A. polyacanthus* Pascoe, but is distinguished by the less prominent sub-obsolete supraocular crests, the granulate, not tuberculate elytra and the multigranulate infra-humeral spine. The fasciculate quasi-tubercles on the third interstice are also distinctive, but are subject to abrasion.

AMORPHORHINUS RUGICOLLIS Lea.

Sosytelus rugicollis Lea, Proc. Linn. Soc. N.S. Wales, xx., 1895, p. 305.

The species described by Lea as *Sosytelus rugicollis* cannot be allowed to remain in that genus. Despite the difference in the elytral sculpture, costate instead of tuberculate, the species seems undoubtedly to belong to *Amorphorhinus*. The structure of the rostrum and the well developed supraocular crests associate it with the latter genus. I might add that Pascoe evidently considered the species to belong here, as there is a specimen in the British Museum labelled by Pascoe with a manuscript name as a new species of *Amorphorhinus*.

Hab.—N.S. Wales: Rooty Hill, Queanbeyan, Cootamundra.

terior ends of both third and fifth interstices incurved; seventh interstice with prominent infra-humeral tubercle, the outer margin set with three or four granules. Sides with rows of small punctures; interstices non-granulate. Under surface slightly convex at base; moderately densely clothed with yellowish-brown pubescence; punctures small, obscured in type, slightly on apical segment. Propectus with a slight nodule in front of anterior coxae, gently concave between. *Dimensions*: 8.5 x 4 mm.

Hab.—Western Australia: Swan River.

Of this species I have examined the type and another specimen in the British Museum. The species is allied to *A. polyacanthus* Pascoe, but is distinguished by the less prominent sub-obsolete supraocular crests, the granulate, not tuberculate elytra and the multigranulate infra-humeral spine. The fasciculate quasi-tubercles on the third interstice are also distinctive, but are subject to abrasion.

AMORPHORHINUS RUGICOLLIS Lea.

Sosytelus rugicollis Lea, Proc. Linn. Soc. N.S. Wales, xx., 1895, p. 305.

The species described by Lea as *Sosytelus rugicollis* cannot be allowed to remain in that genus. Despite the difference in the elytral sculpture, costate instead of tuberculate, the species seems undoubtedly to belong to *Amorphorhinus*. The structure of the rostrum and the well developed supraocular crests associate it with the latter genus. I might add that Pascoe evidently considered the species to belong here, as there is a specimen in the British Museum labelled by Pascoe with a manuscript name as a new species of *Amorphorhinus*.

Hab.—N.S. Wales: Rooty Hill, Queanbeyan, Cootamundra.